

## Appendix A – Compendium

### Forecast of connection point maximum demands

#### Customer forecasts of connection point peaks

Tables A.1 to A.18 show 10-year forecasts of summer and winter native demand at connection point peak, for high, medium and low growth scenarios (refer to Appendix A.2). These forecasts have been supplied by Powerlink customers.

The connection point reactive power (MVA<sub>r</sub>) forecast includes the customer's downstream capacitive compensation.

Groupings of some connection points are used to protect the confidentiality of specific customer loads.

In tables A.1 to A.18 the zones in which connection points are located are abbreviated as follows:

FN	Far North zone
R	Ross zone
N	North zone
CW	Central West zone
G	Gladstone zone
WB	Wide Bay zone
S	Surat zone
B	Bulli zone
SW	South West zone
M	Moreton zone
GC	Gold Coast zone

Table A.1 Ergon connection point forecast of summer high growth native maximum demand

Connection point	Voltage (kV)	Zone	2020/21		2021/22		2022/23		2023/24		2024/25		2025/26		2026/27		2027/28		2028/29		2029/30			
			MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>
Alan Sherriff	132	R	29	8	29	8	29	8	29	8	29	8	30	8	30	8	31	9	31	9	31	9	32	9
Alligator Creek (Louisa Creek)	132	N	41	12	41	12	41	12	42	12	42	13	42	13	43	13	43	13	43	13	43	13	44	13
Alligator Creek	33	N	43	7	43	7	44	8	44	8	44	8	45	8	46	8	47	8	47	8	47	8	48	8
Biloela	66	CW	33	4	33	4	33	4	33	4	34	4	34	4	34	4	35	4	35	4	35	4	35	4
Blackwater	132	CW	29	8	29	8	29	8	29	8	30	8	30	8	30	8	30	8	31	8	31	8	31	8
Blackwater	66	CW	106	19	106	19	107	19	107	20	108	20	113	21	117	21	118	22	119	22	119	22	120	22
Bowen North	66	N	29	7	29	7	29	7	29	7	30	8	30	8	31	8	31	8	31	8	31	8	32	8
Bull Creek (Waggamba)	132	B	20	5	21	5	21	5	21	5	21	5	21	5	21	5	22	5	22	5	22	5	22	5
Cairns	22	FN	65	13	65	12	65	13	66	13	66	13	66	13	67	13	68	13	69	13	69	13	70	13
Cairns City	132	FN	44	0	44	0	44	0	44	0	44	0	44	0	45	0	45	0	46	0	46	0	46	0
Calliope River	132	G	58	7	58	7	59	7	59	8	59	8	60	8	61	8	61	8	62	8	62	8	62	8
Cardwell	22	R	5	2	5	2	5	2	6	2	6	2	6	2	6	2	6	2	6	2	6	2	6	2
Chinchilla	132	S	22	5	22	5	22	5	23	5	23	5	23	5	24	6	24	6	24	6	24	6	25	6
Clare South	66	R	83	26	86	27	88	28	89	28	90	28	91	29	91	29	92	29	93	29	93	29	94	30
Collinsville North	33	N	17	4	17	4	17	4	17	4	17	4	17	4	17	4	17	4	18	4	18	4	18	4
Columboola	132	S	74	11	74	11	74	11	75	11	76	11	76	11	77	11	78	11	78	11	78	11	79	11
Dan Gleeson	66	R	120	3	121	3	116	2	118	2	119	2	122	2	124	2	126	1	129	1	129	1	132	2
Dysart	66	CW	44	10	44	10	45	10	45	10	46	10	46	10	46	10	47	10	47	10	47	10	47	10
Edmonton	22	FN	45	4	45	4	46	4	47	4	48	4	49	4	50	4	51	4	52	4	52	4	54	5
Egans Hill	66	CW	54	14	55	14	55	14	56	14	56	15	57	15	58	15	59	14	60	14	60	14	61	14
El Arish	22	FN	6	0	6	0	6	0	6	0	6	0	6	0	6	0	7	0	7	0	7	0	7	0

**Table A.1** Ergon connection point forecast of summer high growth native maximum demand (continued)

Connection point	Voltage (kV)	Zone	2020/21		2021/22		2022/23		2023/24		2024/25		2025/26		2026/27		2027/28		2028/29		2029/30	
			MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>
Garbutt	66	R	115	3	116	3	111	2	113	2	114	2	116	2	119	2	121	1	123	1	126	1
Gin Gin	132	WB	162	18	164	19	167	19	170	19	172	20	175	20	177	20	180	21	183	21	187	21
Gladstone South	66	G	56	7	56	7	57	7	57	7	58	8	58	8	59	8	60	8	61	8	62	8
Ingham	66	R	19	2	19	2	19	2	19	2	20	2	20	2	20	2	20	2	20	2	20	2
Innisfail	22	FN	28	4	28	5	29	5	29	5	29	5	29	5	30	5	30	5	30	5	31	5
Kamerunga	22	FN	64	3	65	3	66	4	67	4	68	4	70	4	71	4	72	4	74	4	75	4
Lilyvale (Barcaldine & Clermont)	132	CW	43	7	43	7	44	7	44	7	44	7	45	7	45	7	46	7	46	7	46	8
Lilyvale	66	CW	148	67	149	67	150	68	151	69	153	69	154	70	155	70	157	71	158	72	160	72
Mackay	33	N	91	24	91	24	91	24	91	24	92	24	93	24	94	25	94	25	95	25	97	25
Middle Ridge	110	SW	237	60	237	60	239	61	242	61	245	62	248	63	252	64	256	65	261	66	266	68
Middle Ridge (Postmans Ridge)	110	M	29	7	29	7	29	7	29	7	30	7	30	8	30	8	31	8	31	8	32	8
Moranbah (Broadlea)	132	N	44	11	51	12	58	14	58	14	59	14	59	14	60	15	60	15	61	15	61	15
Moranbah	66 and 11	N	138	49	150	54	163	59	164	60	166	60	167	61	169	61	170	62	172	62	173	63
Moura	66	CW	62	20	62	20	62	20	63	20	63	20	64	20	64	21	65	21	65	21	66	21
Nebo	11	N	3	0	3	0	3	0	3	0	4	0	4	0	4	0	4	0	4	0	4	1
Newlands	66	N	27	7	27	7	27	7	27	7	27	7	28	7	28	7	28	7	28	7	29	7
Oakey	110	SW	19	6	19	6	19	6	19	6	19	6	19	6	19	6	20	6	20	6	20	6
Pandoin	66	CW	41	11	41	11	42	11	42	11	43	11	43	11	44	11	45	10	45	11	46	11
Pioneer Valley	66	N	69	12	70	12	70	12	71	12	72	12	73	12	74	13	75	13	76	13	78	13
Proserpine	66	N	52	10	53	10	53	10	54	10	54	11	55	11	56	11	57	11	58	11	59	11
Rockhampton	66	CW	95	25	96	25	97	25	98	25	99	26	100	26	102	26	103	24	105	25	107	25

**Table A.1** Ergon connection point forecast of summer high growth native maximum demand (continued)

Connection point	Voltage (kV)	Zone	2020/21		2021/22		2022/23		2023/24		2024/25		2025/26		2026/27		2027/28		2028/29		2029/30	
			MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>
Ross (Kidston, Millicester and Georgetown)	132	R	42	10	43	10	43	10	43	10	43	10	44	10	44	10	45	10	45	11	45	11
Stony Creek	132	N	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1
Tangkam	110	SW	33	7	33	7	34	7	34	7	34	7	34	7	35	7	35	7	36	7	36	7
Tarong	66	SW	47	12	48	13	48	13	49	13	49	13	50	13	50	13	51	13	52	14	53	14
Teebar Creek (Isis and Maryborough)	132	WB	142	48	147	50	152	52	154	52	156	53	158	54	161	54	164	55	167	56	170	58
Townsville East	66	R	46	2	46	2	44	2	45	2	45	2	46	2	47	2	48	2	48	2	50	2
Townsville South	66	R	104	5	105	5	100	4	101	4	103	4	105	4	106	5	108	5	110	5	113	5
Tully	22	R	15	3	15	3	15	3	15	3	15	3	16	3	16	3	16	3	16	3	17	3
Turkinje (Craglie and Lakeland)	132	FN	20	11	20	11	20	12	20	12	20	12	21	12	21	12	21	12	22	12	22	13
Turkinje	66	FN	70	2	70	2	71	2	71	2	72	2	73	2	74	2	76	2	77	2	79	2
Woolooga (Klikivan)	132	WB	15	3	16	3	16	3	16	3	16	3	17	3	17	3	17	3	18	4	18	4
Woree (Cairns North)	132	FN	46	2	46	2	46	2	47	2	48	2	48	2	49	2	50	2	51	2	52	2
Yarwun (Boat Creek)	132	G	42	18	42	18	42	18	43	18	43	18	43	18	44	18	44	18	44	19	45	19
Hail Creek and King Creek	Various	N	38	6	38	6	38	6	38	6	39	7	39	7	39	7	40	7	40	7	40	7

**Table A.2** Ergon connection point forecast of summer medium growth native maximum demand

Connection point	Voltage (kV)	Zone	2020/21		2021/22		2022/23		2023/24		2024/25		2025/26		2026/27		2027/28		2028/29		2029/30	
			MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>
Alan Sherriff	132	R	29	8	29	8	28	8	28	8	28	8	29	8	29	8	29	8	30	8	30	8
Alligator Creek (Louisa Creek)	132	N	40	12	40	12	40	12	41	12	41	12	41	12	41	12	41	12	41	12	41	12
Alligator Creek	33	N	42	7	43	7	43	7	43	7	43	7	43	8	44	8	44	8	45	8	45	8
Biloela	66	CW	33	4	33	4	33	4	33	4	33	4	33	4	33	4	33	4	33	4	33	4
Blackwater	132	CW	29	8	29	8	29	8	29	8	29	8	29	8	29	8	29	8	29	8	29	8
Blackwater	66	CW	105	19	105	19	105	19	105	19	105	19	109	20	112	21	113	21	113	21	113	21
Bowen North	66	N	29	7	29	7	29	7	29	7	29	7	29	7	29	7	29	7	30	8	30	8
Bull Creek (Waggamba)	132	B	20	5	20	5	20	5	20	5	20	5	20	5	21	5	21	5	21	5	21	5
Cairns	22	FN	65	12	64	12	64	12	64	12	64	12	64	12	64	12	65	12	65	12	66	13
Cairns City	132	FN	43	0	43	0	43	0	43	0	43	0	43	0	43	0	43	0	43	0	43	0
Calliope River	132	G	58	7	58	7	58	7	58	7	58	7	58	7	58	7	58	7	59	7	59	7
Cardwell	22	R	5	2	5	2	5	2	5	2	5	2	5	2	5	2	6	2	6	2	6	2
Chinchilla	132	S	22	5	22	5	22	5	22	5	22	5	22	5	23	5	23	5	23	5	23	5
Clare South	66	R	83	26	85	27	87	27	87	27	87	27	87	27	88	28	88	28	88	28	89	28
Collinsville North	33	N	17	4	17	4	17	4	17	4	17	4	17	4	17	4	17	4	17	4	17	4
Columboola	132	S	73	11	73	11	73	11	73	11	73	11	73	11	74	11	74	11	74	11	74	11
Dan Gleeson	66	R	119	3	120	3	114	2	115	2	116	2	117	2	119	2	120	2	122	2	124	2
Dysart	66	CW	44	9	44	9	44	9	44	9	44	10	44	10	44	10	45	10	45	10	45	10
Edmonton	22	FN	45	4	45	4	45	4	46	4	46	4	47	4	48	4	49	4	49	4	50	4
Egans Hill	66	CW	54	14	54	14	54	14	54	14	55	14	55	14	55	14	56	14	56	15	57	15
El Arish	22	FN	6	0	6	0	6	0	6	0	6	0	6	0	6	0	6	0	6	0	6	0

Table A.2 Ergon connection point forecast of summer medium growth native maximum demand (continued)

Connection point	Voltage (kV)	Zone	2020/21		2021/22		2022/23		2023/24		2024/25		2025/26		2026/27		2027/28		2028/29		2029/30	
			MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>
Garbutt	66	R	114	3	115	3	109	2	110	2	111	2	112	2	114	2	115	2	117	2	119	2
Gin Gin	132	WB	161	18	162	19	164	19	166	19	167	19	168	19	170	19	172	20	173	20	176	20
Gladstone South	66	G	55	7	55	7	56	7	56	7	56	7	56	7	57	7	57	8	58	8	59	8
Ingham	66	R	19	1	19	1	19	1	19	1	19	1	19	1	19	1	19	1	19	1	19	1
Innisfail	22	FN	28	4	28	4	28	4	28	4	28	4	28	5	28	5	29	5	29	5	29	5
Kamerunga	22	FN	64	3	64	3	65	3	66	4	66	4	67	4	68	4	69	4	70	4	71	4
Lilyvale (Barcaldine & Clermont)	132	CW	43	7	43	7	43	7	43	7	43	7	43	7	43	7	43	7	43	7	44	7
Lilyvale	66	CW	147	67	147	67	147	67	148	67	148	67	149	67	149	67	149	68	150	68	150	68
Mackay	33	N	90	24	90	24	89	23	89	23	89	23	89	23	90	24	90	24	90	24	91	24
Middle Ridge	110	SW	235	60	235	60	235	60	236	60	237	60	239	61	241	61	244	62	247	63	250	64
Middle Ridge (Postmans Ridge)	110	M	28	7	28	7	29	7	29	7	29	7	29	7	29	7	29	7	30	7	30	8
Moranbah (Broadlea)	132	N	43	11	50	12	57	14	57	14	57	14	57	14	57	14	57	14	57	14	57	14
Moranbah	66 and 11	N	137	49	148	54	160	58	160	58	161	59	161	59	162	59	162	59	163	59	163	59
Moura	66	CW	61	20	61	20	61	20	61	20	61	20	61	20	62	20	62	20	62	20	62	20
Nebo	11	N	3	0	3	0	3	0	3	0	3	0	3	0	3	0	3	0	3	0	3	0
Newlands	66	N	27	7	27	7	27	7	27	7	27	7	27	7	27	7	27	7	27	7	27	7
Oakey	110	SW	19	6	19	6	19	6	19	6	19	6	19	6	19	6	19	6	19	6	19	6
Pandoin	66	CW	41	11	41	11	41	11	41	11	41	11	42	11	42	11	42	11	43	11	43	11
Pioneer Valley	66	N	69	12	69	12	69	12	69	12	70	12	70	12	71	12	72	12	72	12	73	12
Proserpine	66	N	52	10	52	10	52	10	53	10	53	10	53	10	54	10	54	11	55	11	56	11
Rockhampton	66	CW	95	24	95	24	95	25	96	25	96	25	97	25	97	25	98	25	99	26	100	26

**Table A.2** Ergon connection point forecast of summer medium growth native maximum demand (continued)

Connection point	Voltage (kV)	Zone	2020/21		2021/22		2022/23		2023/24		2024/25		2025/26		2026/27		2027/28		2028/29		2029/30	
			MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>
Ross (Kidston, Millicester and Georgetown)	132	R	42	10	42	10	42	10	42	10	42	10	42	10	42	10	42	10	43	10	43	10
Stony Creek	132	N	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1
Tangkam	110	SW	33	7	33	7	33	7	33	7	33	7	33	7	33	7	34	7	34	7	34	7
Tarong	66	SW	47	12	47	12	47	12	48	12	48	13	48	13	48	13	49	13	49	13	49	13
Teebar Creek (Iris and Maryborough)	132	WB	140	48	145	49	150	51	150	51	151	51	152	52	154	52	156	53	158	53	160	54
Townsville East	66	R	45	2	45	2	43	2	44	2	44	2	44	2	45	2	45	2	46	2	47	2
Townsville South	66	R	103	5	103	5	98	4	99	4	100	4	101	4	102	4	103	4	105	4	106	4
Tully	22	R	15	3	15	3	15	3	15	3	15	3	15	3	15	3	15	3	15	3	16	3
Turkinje (Craigie and Lakeland)	132	FN	19	11	20	11	20	11	20	11	20	11	20	12	20	12	20	12	20	12	21	12
Turkinje	66	FN	69	2	69	2	69	2	70	2	70	2	71	2	71	2	72	2	73	2	74	2
Woolooga (Klikivan)	132	WB	15	3	16	3	16	3	16	3	16	3	16	3	16	3	16	3	17	3	17	3
Woree (Cairns North)	132	FN	45	2	45	2	46	2	46	2	46	2	47	2	47	2	47	2	48	2	49	2
Yarwun (Boat Creek)	132	G	42	17	42	17	42	17	42	17	42	17	42	18	42	18	42	18	42	18	42	18
Hall Creek and King Creek	Various	N	37	6	37	6	37	6	37	6	37	6	38	6	38	6	38	6	38	6	38	6

**Table A.3** Ergon connection point forecast of summer low growth native maximum demand

Connection point	Voltage (kV)	Zone	2020/21		2021/22		2022/23		2023/24		2024/25		2025/26		2026/27		2027/28		2028/29		2029/30			
			MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>
Alan Sherriff	132	R	28	8	28	8	28	8	28	8	28	8	28	8	28	8	28	8	28	8	28	8	28	8
Alligator Creek (Louisa Creek)	132	N	40	12	40	12	40	12	40	12	40	12	40	12	39	12	39	12	39	12	39	12	39	12
Alligator Creek	33	N	42	7	42	7	42	7	42	7	42	7	42	7	42	7	42	7	42	7	42	7	43	7
Biloela	66	CW	33	4	32	4	32	3	32	3	32	3	32	3	32	3	31	3	31	3	31	3	31	3
Blackwater	132	CW	28	8	28	8	28	8	28	8	28	8	28	8	28	8	28	7	28	7	28	7	27	7
Blackwater	66	CW	104	19	104	19	103	19	102	19	102	19	105	19	108	20	108	20	107	20	107	20	106	19
Bowen North	66	N	28	7	28	7	28	7	28	7	28	7	28	7	28	7	28	7	28	7	28	7	28	7
Bull Creek (Waggamba)	132	B	20	5	20	5	20	5	20	5	20	5	20	5	20	5	20	5	20	5	20	5	19	5
Cairns	22	FN	64	12	64	12	63	12	62	12	62	12	62	12	62	12	62	12	62	12	62	12	62	12
Cairns City	132	FN	43	0	43	0	42	0	42	0	42	0	41	0	41	0	41	0	41	0	41	0	41	0
Calliope River	132	G	57	7	57	7	56	7	56	7	56	7	56	7	56	7	56	7	56	7	56	7	55	7
Cardwell	22	R	5	2	5	2	5	2	5	2	5	2	5	2	5	2	5	2	5	2	5	2	5	2
Chinchilla	132	S	22	5	22	5	22	5	22	5	22	5	22	5	22	5	22	5	22	5	22	5	22	5
Clare South	66	R	82	26	84	26	85	27	85	27	85	27	85	27	84	27	84	26	84	26	84	26	83	26
Collinsville North	33	N	17	4	16	4	16	4	16	4	16	4	16	4	16	4	16	4	16	4	16	4	16	4
Columboola	132	S	73	11	72	10	72	10	72	10	71	10	71	10	71	10	71	10	70	10	70	10	70	10
Dan Gleeson	66	R	119	3	119	3	112	2	113	2	113	2	114	2	114	2	115	2	116	2	116	2	117	2
Dysart	66	CW	44	9	44	9	43	9	43	9	43	9	43	9	43	9	43	9	42	9	42	9	42	9
Edmonton	22	FN	44	4	44	4	45	4	45	4	45	4	46	4	46	4	47	4	47	4	47	4	48	4
Egans Hill	66	CW	54	14	53	14	53	14	53	14	53	14	53	14	53	14	53	14	54	14	54	14	54	14
El Arish	22	FN	6	0	6	0	6	0	6	0	6	0	6	0	6	0	6	0	6	0	6	0	6	0



**Table A.3** Ergon connection point forecast of summer low growth native maximum demand (continued)

Connection point	Voltage (kV)	Zone	2020/21		2021/22		2022/23		2023/24		2024/25		2025/26		2026/27		2027/28		2028/29		2029/30	
			MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>
Garbutt	66	R	114	3	114	3	107	2	108	2	108	2	109	2	109	2	110	2	111	2	112	2
Gin Gin	132	WB	160	18	161	18	162	18	162	19	162	19	163	19	163	19	164	19	164	19	166	19
Gladstone South	66	G	55	7	55	7	55	7	55	7	54	7	55	7	55	7	55	7	55	7	55	7
Ingham	66	R	19	1	19	1	19	1	19	1	18	1	18	1	18	1	18	1	18	1	18	1
Innisfail	22	FN	28	4	28	4	28	4	28	4	27	4	27	4	27	4	27	4	27	4	27	4
Kamerunga	22	FN	63	3	64	3	64	3	64	3	65	3	65	3	65	3	66	4	66	4	67	4
Lilyvale (Barcalaine & Clermont)	132	CW	43	7	42	7	42	7	42	7	42	7	42	7	42	7	41	7	41	7	41	7
Lilyvale	66	CW	146	66	146	66	145	66	145	65	144	65	144	65	143	65	143	65	142	64	141	64
Mackay	33	N	90	24	89	23	88	23	87	23	87	23	87	23	86	23	86	23	86	23	86	23
Middle Ridge	110	SW	233	59	232	59	231	59	231	59	231	59	232	59	232	59	233	59	234	59	236	60
Middle Ridge (Postmans Ridge)	110	M	28	7	28	7	28	7	28	7	28	7	28	7	28	7	28	7	28	7	28	7
Moranbah (Broadlea)	132	N	43	10	49	12	56	14	56	14	55	13	55	13	55	13	55	13	54	13	54	13
Moranbah	66 and 11	N	136	49	147	53	157	57	157	57	156	57	156	57	156	57	155	56	154	56	154	56
Moura	66	CW	61	20	61	19	60	19	60	19	60	19	60	19	59	19	59	19	59	19	58	19
Nebo	11	N	3	0	3	0	3	0	3	0	3	0	3	0	3	0	3	0	3	0	3	0
Newlands	66	N	26	7	26	7	26	7	26	7	26	7	26	7	26	6	26	6	26	6	25	6
Oakey	110	SW	19	6	19	6	18	6	18	6	18	6	18	6	18	6	18	6	18	6	18	6
Pandoin	66	CW	41	10	41	10	40	10	40	10	40	10	40	10	40	10	41	10	41	10	41	10
Pioneer Valley	66	N	68	12	68	12	68	12	68	12	68	12	68	12	68	12	69	12	69	12	69	12
Proserpine	66	N	51	10	51	10	51	10	51	10	51	10	52	10	52	10	52	10	52	10	53	10
Rockhampton	66	CW	94	24	94	24	94	24	93	24	93	24	94	24	94	24	94	24	94	24	95	24

**Table A.3** Ergon connection point forecast of summer low growth native maximum demand (continued)

Connection point	Voltage (kV)	Zone	2020/21		2021/22		2022/23		2023/24		2024/25		2025/26		2026/27		2027/28		2028/29		2029/30	
			MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>
Ross (Kidston, Millichester and Georgetown)	132	R	42	10	42	10	41	10	41	10	41	10	41	10	41	10	41	10	40	9	40	9
Stony Creek	132	N	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1
Tangkam	110	SW	33	7	33	7	32	7	32	6	32	6	32	6	32	6	32	6	32	6	32	6
Tarong	66	SW	47	12	47	12	47	12	47	12	46	12	47	12	46	12	47	12	47	12	47	12
Teebar Creek (Isis and Maryborough)	132	WB	140	47	144	49	147	50	147	50	147	50	148	50	148	50	149	51	150	51	151	51
Townsville East	66	R	45	2	45	2	42	2	43	2	43	2	43	2	43	2	43	2	44	2	44	2
Townsville South	66	R	102	5	102	5	97	4	97	4	97	4	98	4	98	4	99	4	99	4	100	4
Tully	22	R	15	3	15	3	15	3	15	3	15	3	15	3	15	3	15	3	15	3	15	3
Turkinje (Craigie and Lakeland)	132	FN	19	11	19	11	19	11	19	11	19	11	19	11	19	11	19	11	19	11	19	11
Turkinje	66	FN	69	2	68	2	68	2	68	2	68	2	68	2	68	2	69	2	69	2	70	2
Woolooga (Kilkivan)	132	WB	15	3	16	3	15	3	15	3	15	3	15	3	16	3	16	3	16	3	16	3
Woree (Cairns North)	132	FN	45	2	45	2	45	2	45	2	45	2	45	2	45	2	45	2	45	2	46	2
Yarwun (Boat Creek)	132	G	41	17	41	17	41	17	41	17	41	17	41	17	40	17	40	17	40	17	40	17
Hail Creek and King Creek	Various	N	37	6	37	6	37	6	37	6	36	6	36	6	36	6	36	6	36	6	36	6

**Table A.4** Ergon connection point forecast of winter high growth native maximum demand

Connection Point	Voltage (kV)	Zone	2021		2022		2023		2024		2025		2026		2027		2028		2029		2030			
			MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>
Alan Sherriff	132	R	16	3	16	3	16	3	16	3	16	3	16	3	16	4	17	4	17	4	17	4	17	4
Alligator Creek (Louisa Creek)	132	N	40	13	40	13	40	13	41	13	41	13	41	13	41	13	41	13	41	13	41	13	42	13
Alligator Creek	33	N	27	6	27	6	27	6	27	6	28	6	28	6	28	6	28	6	29	6	29	6	29	6
Biloela	66	CW	29	7	28	7	28	7	28	7	29	7	29	7	29	7	29	7	29	7	29	7	29	7
Blackwater	132	CW	27	11	27	11	27	11	27	11	27	11	27	11	27	11	28	11	28	11	28	11	28	12
Blackwater	66	CW	92	10	92	10	91	10	92	10	93	10	96	10	99	11	99	11	100	11	100	11	101	11
Bowen North	66	N	24	9	24	9	24	9	24	9	24	9	24	9	24	9	25	9	25	9	25	9	25	9
Bull Creek (Waggamba)	132	B	22	7	22	7	22	7	22	7	22	7	22	7	22	7	22	7	22	7	22	7	23	7
Cairns	22	FN	39	9	39	9	38	9	38	9	38	9	39	9	39	9	39	9	39	9	39	9	40	10
Cairns City	132	FN	30	0	29	0	29	0	29	0	29	0	29	0	29	0	29	0	30	0	30	0	30	0
Calliope River	132	G	50	2	50	2	50	2	50	2	51	2	51	2	51	2	51	2	51	2	51	2	52	2
Cardwell	22	R	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	1
Chinchilla	132	S	18	3	18	3	18	3	18	3	18	3	18	3	18	3	18	3	19	3	19	3	19	3
Clare South	66	R	57	12	58	12	58	12	58	12	58	12	58	12	59	12	59	12	59	12	59	12	60	13
Collinsville North	33	N	14	4	14	4	14	4	14	4	14	4	14	4	14	4	14	4	14	4	14	4	14	4
Columboola	132	S	59	17	59	17	59	17	59	17	59	17	60	17	60	17	60	17	60	17	60	17	61	18
Dan Gleeson	66	R	100	9	100	9	93	7	94	7	95	7	96	7	98	7	99	7	100	7	100	7	103	7
Dysart	66	CW	42	9	41	9	41	9	42	9	42	9	42	9	42	9	42	9	42	9	42	9	43	9
Edmonton	22	FN	30	4	30	4	30	4	30	4	31	4	31	4	32	4	32	5	33	5	33	5	34	5
Egans Hill	66	CW	42	6	42	6	42	6	42	6	42	6	42	6	43	6	43	6	44	6	44	6	45	6
El Arish	22	FN	5	0	5	0	5	0	5	0	5	0	5	0	5	0	5	0	5	0	5	0	5	0

Table A.4 Ergon connection point forecast of winter high growth native maximum demand (continued)

Connection Point	Voltage (kV)	Zone	2021		2022		2023		2024		2025		2026		2027		2028		2029		2030	
			MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>
Garbutt	66	R	99	9	99	9	93	7	94	7	95	7	96	7	97	7	98	7	100	7	102	7
Gin Gin	132	WB	127	16	129	16	130	17	131	17	132	17	133	17	134	17	136	17	138	18	141	18
Gladstone South	66	G	51	27	51	27	51	27	51	28	52	28	52	28	52	28	53	28	53	29	55	29
Ingham	66	R	15	2	15	2	15	2	15	2	15	2	15	2	15	2	15	2	15	2	15	2
Innisfail	22	FN	19	5	19	5	19	5	19	5	19	5	19	5	19	5	19	5	19	5	19	5
Kamerunga	22	FN	42	3	43	3	43	3	44	4	44	4	45	4	45	4	46	4	47	4	48	4
Lilyvale (Barcaldine & Clermont)	132	CW	32	11	32	11	32	11	32	11	32	11	32	11	32	11	32	11	32	11	33	11
Lilyvale	66	CW	136	56	136	56	136	56	137	56	138	57	138	57	138	57	138	57	139	57	140	58
Mackay	33	N	59	19	59	19	58	19	59	19	59	19	59	19	59	19	59	19	59	19	60	20
Middle Ridge	110	SW	252	44	251	43	251	44	254	44	256	44	258	45	260	45	263	45	267	46	273	47
Middle Ridge (Postmans Ridge)	110	M	13	4	13	4	13	4	13	4	13	4	13	4	14	4	14	4	14	4	14	4
Moranbah (Broadlea)	132	N	41	8	47	9	53	11	53	11	53	11	53	11	54	11	54	11	54	11	54	11
Moranbah	66 and 11	N	131	43	142	47	152	51	154	51	155	51	155	51	155	52	156	52	156	52	158	52
Moura	66	CW	61	20	60	20	60	19	61	20	61	20	61	20	61	20	61	20	61	20	62	20
Nebo	11	N	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
Newlands	66	N	22	1	22	1	22	1	22	1	22	1	22	1	22	1	22	1	22	1	22	1
Oakey	110	SW	19	6	19	6	19	6	19	6	19	6	19	6	19	6	19	6	19	6	20	6
Pandoin	66	CW	31	4	31	5	31	4	32	5	32	5	32	5	32	5	33	5	33	5	34	5
Pioneer Valley	66	N	49	4	49	4	49	4	50	4	50	4	50	4	51	4	51	4	52	4	53	4
Proserpine	66	N	33	3	33	3	33	3	34	3	34	3	34	3	34	3	35	3	35	3	36	3
Rockhampton	66	CW	69	10	69	10	69	10	70	10	70	10	71	10	71	10	72	10	73	10	74	10

**Table A.4** Ergon connection point forecast of winter high growth native maximum demand (continued)

Connection Point	Voltage (kV)	Zone	2021		2022		2023		2024		2025		2026		2027		2028		2029		2030	
			MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>
Ross (Kidston, Millicester and Georgetown)	132	R	36	15	36	15	36	15	36	15	36	15	36	15	36	15	36	15	37	15	37	15
Stony Creek	132	N	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1
Tangkam	110	SW	30	5	30	5	30	5	30	5	31	5	31	5	31	5	31	5	31	5	32	5
Tarong	66	SW	46	11	46	11	46	11	47	11	47	11	47	11	47	11	48	11	48	11	49	12
Teebar Creek (Iris and Maryborough)	132	WB	127	31	129	31	131	32	132	32	133	32	134	32	135	33	136	33	138	33	141	34
Townsville East	66	R	43	4	43	4	40	3	41	3	41	3	41	3	42	3	42	3	43	3	44	3
Townsville South	66	R	90	9	90	9	84	6	85	6	86	6	87	6	88	6	89	6	91	7	93	7
Tully	22	R	10	1	10	1	10	1	10	1	10	1	10	1	10	1	10	1	10	1	11	1
Turkinje (Craigie and Lakeland)	132	FN	17	11	17	11	17	11	17	11	17	11	17	11	18	11	18	11	18	12	18	12
Turkinje	66	FN	62	4	62	4	62	4	63	4	63	4	64	4	64	4	65	4	66	4	67	4
Woolooga (Klikivan)	132	WB	17	6	18	6	18	6	18	6	18	6	18	6	18	6	19	6	19	7	20	7
Woree (Cairns North)	132	FN	31	3	31	3	31	3	32	3	32	4	32	4	32	4	33	4	33	4	34	4
Yarwun (Boat Creek)	132	G	42	15	42	15	42	15	42	15	42	16	42	16	43	16	43	16	43	16	43	16
Hall Creek and King Creek	Various	N	36	6	36	6	36	6	37	6	37	6	37	6	37	6	37	6	37	6	37	7

**Table A.5** Ergon connection point forecast of winter medium growth native maximum demand

Connection point	Voltage (kV)	Zone	2021		2022		2023		2024		2025		2026		2027		2028		2029		2030	
			MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR
Alan Sherriff	132	R	16	3	16	3	16	3	16	3	16	3	16	3	16	3	16	3	16	3	16	4
Alligator Creek (Louisa Creek)	132	N	40	13	40	13	40	13	40	13	40	13	40	13	40	13	39	13	39	13	39	13
Alligator Creek	33	N	27	6	27	6	27	6	27	6	27	6	27	6	27	6	27	6	27	6	27	6
Biloela	66	CW	28	7	28	6	28	6	28	6	28	6	28	6	28	6	28	6	28	6	28	6
Blackwater	132	CW	27	11	27	11	27	11	27	11	27	11	27	11	27	11	27	11	26	11	26	11
Blackwater	66	CW	91	10	90	10	90	10	90	10	90	10	93	10	96	10	96	10	96	10	96	10
Bowen North	66	N	24	9	24	9	23	8	24	9	24	9	24	9	24	9	24	9	24	9	24	9
Bull Creek (Waggamba)	132	B	22	7	22	6	22	6	22	6	22	6	22	6	22	6	21	6	21	6	21	6
Cairns	22	FN	39	9	38	9	38	9	38	9	38	9	38	9	38	9	37	9	38	9	38	9
Cairns City	132	FN	29	0	29	0	29	0	29	0	29	0	29	0	29	0	28	0	28	0	28	0
Calliope River	132	G	50	2	49	2	49	2	49	2	49	2	49	2	49	2	49	2	49	2	49	2
Cardwell	22	R	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	1
Chinchilla	132	S	18	3	17	3	17	3	18	3	18	3	18	3	18	3	18	3	18	3	18	3
Clare South	66	R	56	12	57	12	57	12	57	12	57	12	57	12	57	12	57	12	57	12	57	12
Collinsville North	33	N	14	4	14	4	14	4	14	4	14	4	14	4	14	4	13	4	13	4	14	4
Columboola	132	S	59	17	58	17	58	17	58	17	58	17	58	17	58	17	58	17	58	17	58	17
Dan Gleeson	66	R	99	9	98	9	92	7	93	7	93	7	94	7	95	7	95	7	96	7	96	7
Dysart	66	CW	41	9	41	9	41	8	41	9	41	9	41	8	41	8	41	8	41	8	41	8
Edmonton	22	FN	29	4	29	4	29	4	30	4	30	4	30	4	31	4	31	4	32	4	32	4
Egans Hill	66	CW	41	6	41	6	41	6	41	6	41	6	41	6	42	6	42	6	42	6	42	6
ElArish	22	FN	5	0	5	0	5	0	5	0	5	0	5	0	5	0	5	0	5	0	5	0

**Table A.5** Ergon connection point forecast of winter medium growth native maximum demand (continued)

Connection Point	Voltage (kV)	Zone	2021		2022		2023		2024		2025		2026		2027		2028		2029		2030	
			MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>
Garbutt	66	R	98	9	98	9	91	6	92	7	93	7	93	7	94	7	95	7	96	7	97	7
Gin Gin	132	WB	126	16	127	16	128	16	128	16	129	16	130	17	130	17	131	17	132	17	134	17
Gladstone South	66	G	50	27	50	27	50	27	50	27	50	27	51	27	51	27	51	27	51	28	52	28
Ingham	66	R	15	2	15	2	14	2	15	2	14	2	14	2	14	2	14	2	14	2	14	2
Innisfail	22	FN	18	5	18	5	18	5	18	5	18	5	18	5	18	5	18	5	18	5	18	5
Kamerunga	22	FN	42	3	42	3	42	3	43	3	43	4	43	4	44	4	44	4	45	4	45	4
Lilyvale (Barcaldine & Clermont)	132	CW	32	11	31	11	31	11	31	11	31	11	31	11	31	11	31	11	31	11	31	11
Lilyvale	66	CW	135	56	134	55	134	55	134	55	134	55	134	55	134	55	133	55	133	55	133	55
Mackay	33	N	59	19	58	19	57	19	57	19	57	19	57	18	57	18	57	18	57	18	57	19
Middle Ridge	110	SW	250	43	248	43	247	43	249	43	250	43	251	43	253	44	253	44	255	44	260	45
Middle Ridge (Postmans Ridge)	110	M	13	4	13	4	13	4	13	4	13	4	13	4	13	4	13	4	13	4	13	4
Moranbah (Broadlea)	132	N	40	8	46	9	52	10	52	10	52	10	52	10	52	10	52	10	52	10	52	10
Moranbah	66 and 11	N	130	43	140	46	150	50	151	50	151	50	151	50	151	50	150	50	150	50	150	50
Moura	66	CW	60	19	60	19	59	19	60	19	60	19	59	19	59	19	59	19	59	19	59	19
Nebo	11	N	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
Newlands	66	N	22	1	21	1	21	1	21	1	21	1	21	1	21	1	21	1	21	1	21	1
Oakey	110	SW	19	6	19	6	19	6	19	6	19	5	19	5	19	5	18	5	18	5	19	5
Pandoin	66	CW	31	4	31	4	31	4	31	4	31	4	31	4	31	4	31	4	32	4	32	4
Pioneer Valley	66	N	49	4	48	4	48	4	49	4	49	4	49	4	49	4	49	4	49	4	50	4
Proserpine	66	N	33	3	33	3	33	3	33	3	33	3	33	3	33	3	34	3	34	3	34	3
Rockhampton	66	CW	69	10	68	10	68	10	69	10	69	10	69	10	69	10	69	10	70	10	71	10

**Table A.5** Ergon connection point forecast of winter medium growth native maximum demand (continued)

Connection Point	Voltage (kV)	Zone	2021		2022		2023		2024		2025		2026		2027		2028		2029		2030			
			MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>
Ross (Kidston, Millicester and Georgetown)	132	R	36	15	35	15	35	14	35	14	35	14	35	14	35	14	35	14	35	14	35	14	35	14
Stony Creek	132	N	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1
Tangkam	110	SW	30	5	30	5	30	5	30	5	30	5	30	5	30	5	30	5	30	5	30	5	30	5
Tarong	66	SW	46	11	46	11	45	11	46	11	46	11	46	11	46	11	46	11	46	11	46	11	47	11
Teebar Creek (Isis and Maryborough)	132	WB	125	30	127	31	129	31	130	31	130	32	130	32	131	32	131	32	131	32	132	32	134	32
Townsville East	66	R	42	4	42	4	39	3	40	3	40	3	40	3	41	3	41	3	41	3	41	3	42	3
Townsville South	66	R	89	8	89	8	83	6	84	6	84	6	85	6	85	6	86	6	87	6	87	6	88	6
Tully	22	R	10	1	10	1	10	1	10	1	10	1	10	1	10	1	10	1	10	1	10	1	10	1
Turkinje (Craigie and Lakeland)	132	FN	17	11	17	11	17	11	17	11	17	11	17	11	17	11	17	11	17	11	17	11	17	11
Turkinje	66	FN	62	3	61	3	61	3	62	3	62	3	62	3	62	4	63	4	63	4	63	4	64	4
Woolooga (Kilkivan)	132	WB	17	6	18	6	18	6	18	6	18	6	18	6	18	6	18	6	18	6	18	6	19	6
Woree (Cairns North)	132	FN	31	3	31	3	31	3	31	3	31	3	31	3	31	3	32	3	32	3	32	3	32	4
Yarwun (Boat Creek)	132	G	42	15	41	15	41	15	41	15	41	15	41	15	41	15	41	15	41	15	41	15	41	15
Hail Creek and King Creek	Various	N	36	6	36	6	36	6	36	6	36	6	36	6	36	6	36	6	36	6	36	6	36	6



**Table A.6** Ergon connection point forecast of winter low growth native maximum demand

Connection Point	Voltage (kV)	Zone	2021		2022		2023		2024		2025		2026		2027		2028		2029		2030	
			MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>
Alan Sherriff	132	R	16	3	16	3	15	3	15	3	15	3	15	3	15	3	15	3	15	3	15	3
Alligator Creek (Louisa Creek)	132	N	39	13	39	13	39	12	39	12	39	12	38	12	38	12	37	12	37	12	37	12
Alligator Creek	33	N	26	6	26	6	26	6	26	6	26	6	26	6	26	6	26	6	26	6	26	6
Biloela	66	CW	28	6	28	6	27	6	27	6	27	6	27	6	26	6	26	6	26	6	26	6
Blackwater	132	CW	27	11	26	11	26	11	26	11	26	11	25	10	25	10	25	10	25	10	25	10
Blackwater	66	CW	90	10	89	10	88	9	88	9	87	9	90	10	91	10	90	10	89	10	89	10
Bowen North	66	N	23	8	23	8	23	8	23	8	23	8	23	8	23	8	22	8	22	8	22	8
Bull Creek (Waggamba)	132	B	22	6	21	6	21	6	21	6	21	6	21	6	20	6	20	6	20	6	20	6
Cairns	22	FN	38	9	37	9	37	9	37	9	36	9	36	9	36	9	35	8	35	8	35	8
Cairns City	132	FN	29	0	29	0	28	0	28	0	28	0	27	0	27	0	27	0	26	0	26	0
Calliope River	132	G	49	2	49	2	48	2	48	2	48	2	47	2	47	2	46	2	46	2	46	2
Cardwell	22	R	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	1	4	1
Chinchilla	132	S	17	3	17	3	17	3	17	3	17	3	17	3	17	3	17	3	17	3	17	3
Clare South	66	R	56	12	56	12	56	12	55	12	55	12	55	11	54	11	53	11	53	11	53	11
Collinsville North	33	N	14	4	14	4	13	4	13	4	13	4	13	4	13	3	13	3	13	3	13	3
Columboola	132	S	58	17	57	17	57	16	57	16	56	16	56	16	55	16	54	16	54	16	54	15
Dan Gleeson	66	R	98	9	97	9	90	6	90	6	90	6	90	6	90	6	90	6	90	6	91	7
Dysart	66	CW	41	8	40	8	40	8	40	8	40	8	39	8	39	8	38	8	38	8	38	8
Edmonton	22	FN	29	4	29	4	29	4	29	4	29	4	29	4	29	4	29	4	29	4	29	4
Egans Hill	66	CW	41	6	40	6	40	6	40	6	40	6	40	6	39	6	39	6	39	5	39	5
El Arish	22	FN	5	0	5	0	5	0	5	0	4	0	4	0	4	0	4	0	4	0	4	0

Table A.6 Ergon connection point forecast of winter low growth native maximum demand (continued)

Connection Point	Voltage (kV)	Zone	2021		2022		2023		2024		2025		2026		2027		2028		2029		2030			
			MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>
Garbutt	66	R	97	9	96	9	96	9	89	6	89	6	90	6	89	6	89	6	89	6	89	6	90	7
Gin Gin	132	WB	125	16	125	16	125	16	125	16	125	16	124	16	124	16	123	16	123	16	123	16	124	16
Gladstone South	66	G	50	27	49	27	49	26	49	26	49	26	48	26	48	26	48	26	48	26	48	26	48	26
Ingham	66	R	15	2	14	2	14	2	14	2	14	2	14	2	14	2	13	2	13	2	13	2	13	2
Innisfail	22	FN	18	5	18	5	18	5	18	5	18	5	18	5	17	4	17	4	17	4	17	4	17	4
Kamerunga	22	FN	42	3	41	3	41	3	42	3	42	3	42	3	42	3	42	3	42	3	42	3	42	3
Lilyvale (Barcaldine & Clermont)	132	CW	31	11	31	10	31	10	30	10	30	10	30	10	30	10	29	10	29	10	29	10	29	10
Lilyvale	66	CW	134	55	132	54	131	54	131	54	130	54	129	53	127	52	126	52	124	51	124	51	124	51
Mackay	33	N	58	19	57	18	56	18	56	18	56	18	55	18	54	18	54	17	53	17	53	17	53	17
Middle Ridge	110	SW	247	43	244	42	242	42	243	42	242	42	241	42	240	42	239	41	238	41	238	41	241	42
Middle Ridge (Postmans Ridge)	110	M	13	4	13	4	13	4	13	4	13	4	13	4	12	4	12	4	12	4	12	4	12	4
Moranbah (Broadlea)	132	N	40	8	45	9	51	10	51	10	50	10	50	10	49	10	49	10	48	10	48	10	48	10
Moranbah	66 and 11	N	128	42	138	46	147	49	147	49	146	49	145	48	143	47	141	47	140	46	140	46	139	46
Moura	66	CW	59	19	59	19	58	19	58	19	58	19	57	18	56	18	56	18	55	18	55	18	55	18
Nebo	11	N	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0
Newlands	66	N	21	1	21	1	21	1	21	1	21	1	21	1	20	1	20	1	20	1	20	1	20	1
Oakey	110	SW	19	6	19	5	18	5	18	5	18	5	18	5	18	5	17	5	17	5	17	5	17	5
Pandoin	66	CW	31	4	30	4	30	4	30	4	30	4	30	4	30	4	30	4	29	4	29	4	30	4
Pioneer Valley	66	N	48	4	48	4	47	4	47	4	47	4	47	4	47	4	46	4	46	4	46	4	46	4
Proserpine	66	N	32	3	32	3	32	3	32	3	32	3	32	3	32	3	32	3	32	3	32	3	32	3
Rockhampton	66	CW	68	10	67	10	67	10	67	10	67	10	66	9	66	9	65	9	65	9	65	9	66	9

**Table A.6** Ergon connection point forecast of winter low growth native maximum demand (continued)

Connection Point	Voltage (kV)	Zone	2021		2022		2023		2024		2025		2026		2027		2028		2029		2030			
			MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>
Ross (Kidston, Millicester and Georgetown)	132	R	35	14	35	14	34	14	34	14	34	14	34	14	33	14	33	14	33	13	33	13	33	13
Stony Creek	132	N	3	1	3	1	3	1	3	1	3	1	3	1	2	1	2	1	2	1	2	1	2	1
Tangkam	110	SW	30	5	29	5	29	5	29	5	29	5	29	5	28	5	28	4	28	4	28	4	28	4
Tarong	66	SW	45	11	45	11	45	11	45	11	44	10	44	10	44	10	43	10	43	10	43	10	43	10
Teebar Creek (Iris and Maryborough)	132	WB	124	30	125	30	126	31	126	31	126	31	125	30	125	30	124	30	123	30	123	30	125	30
Townsville East	66	R	42	4	42	4	39	3	39	3	39	3	39	3	39	3	38	3	39	3	39	3	39	3
Townsville South	66	R	88	8	87	8	81	6	81	6	82	6	81	6	81	6	81	6	81	6	81	6	82	6
Tully	22	R	10	1	10	1	10	1	10	1	10	1	10	1	9	1	9	1	9	1	9	1	9	1
Turkinje (Craigie and Lakeland)	132	FN	17	11	17	11	16	11	16	11	16	11	16	10	16	10	16	10	16	10	16	10	16	10
Turkinje	66	FN	61	3	60	3	60	3	60	3	60	3	60	3	59	3	59	3	59	3	59	3	59	3
Woolooga (Klikivan)	132	WB	17	6	17	6	17	6	17	6	17	6	17	6	17	6	17	6	17	6	17	6	17	6
Woree (Cairns North)	132	FN	31	3	30	3	30	3	30	3	30	3	30	3	30	3	30	3	30	3	30	3	30	3
Yarwun (Boat Creek)	132	G	41	15	41	15	40	15	40	15	40	15	40	15	39	14	39	14	38	14	38	14	38	14
Hall Creek and King Creek	Various	N	36	6	35	6	35	6	35	6	35	6	34	6	34	6	34	6	33	6	33	6	33	6

Table A.7 EnergeX connection point forecast of summer high growth native maximum demand

Connection point	Voltage (kV)	Zone	2020/21		2021/22		2022/23		2023/24		2024/25		2025/26		2026/27		2027/28		2028/29		2029/30	
			MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>
Abermain	110	M	73	9	74	9	75	10	76	10	78	10	82	10	83	11	85	11	87	11	89	11
Abermain	33	M	110	15	116	16	124	17	128	18	129	18	132	18	134	18	137	19	140	19	142	20
Algester	33	M	71	16	72	16	72	16	73	16	73	16	74	16	75	16	76	17	77	17	78	17
Ashgrove West	110	M	120	24	123	25	129	26	134	27	137	28	138	28	140	29	142	29	144	30	146	30
Ashgrove West	33	M	77	9	77	10	79	10	79	10	80	10	81	10	82	10	84	10	85	10	86	11
Belmont	110	M	426	104	441	108	450	110	456	112	462	113	468	115	473	116	484	118	491	120	499	122
Blackstone (Raceview)	110	M	104	13	107	13	110	14	113	14	115	14	118	15	121	15	124	15	127	16	131	16
Bundamba	110	M	35	12	36	12	36	12	37	13	38	13	38	13	38	13	39	13	40	14	40	14
Goodna	33	M	138	5	143	5	148	5	153	5	157	5	163	5	169	6	176	6	183	6	190	6
Loganlea	110	M	429	153	437	156	446	160	455	163	462	165	472	169	482	173	499	178	511	183	524	187
Loganlea	33	M	101	7	99	7	100	7	101	7	102	7	103	8	104	8	107	8	109	8	111	8
Middle Ridge (Postmans Ridge and Gattton)	110	M	110	6	113	6	115	6	116	6	117	6	119	6	120	6	123	7	124	7	126	7
Molendinar	110	GC	462	3	469	3	481	3	490	3	500	3	511	3	519	3	534	3	546	3	559	3
Mudgeeraba	110	GC	370	111	375	112	383	114	389	116	394	118	401	120	406	121	416	125	424	127	435	130
Mudgeeraba	33	GC	25	7	25	7	26	7	26	8	26	8	27	8	27	8	28	8	29	8	29	9
Muramie	110	M	545	49	561	50	574	51	593	53	616	55	627	56	634	57	646	58	654	58	662	59
Palmwoods	110 & 132	M	398	149	414	155	427	160	438	164	447	167	460	172	469	175	483	181	499	187	513	192
Redbank Plains	11	M	29	4	30	4	31	4	31	5	32	5	33	5	34	5	36	5	37	5	39	6
Richlands	33	M	122	21	122	21	123	21	124	21	125	21	127	21	128	22	130	22	133	22	135	23
Rocklea	110	M	170	24	166	24	168	24	170	24	172	24	174	25	176	25	180	26	183	26	186	26
Runcom	33	M	60	0	63	0	64	0	64	0	65	0	66	0	66	0	68	0	69	0	70	0
South Pine	110	M	982	90	1001	92	1019	94	1034	95	1048	96	1066	98	1081	99	1109	102	1129	104	1152	106

**Table A.7** Energex connection point forecast of summer high growth native maximum demand (continued)

Connection point	Voltage (kV)	Zone	2020/21		2021/22		2022/23		2023/24		2024/25		2025/26		2026/27		2027/28		2028/29		2029/30	
			MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR
Summer	110	M	35	13	35	13	35	13	36	13	36	13	36	13	36	13	37	13	37	13	37	13
Tennyson	33	M	181	10	187	10	194	11	198	11	202	11	205	11	207	11	211	11	214	12	216	12
Wecker Road	33	M	134	18	135	18	137	18	138	18	140	19	142	19	143	19	147	19	149	20	152	20
Woolooga (Gympie)	132	M	224	1	227	1	230	1	233	1	236	1	239	1	241	1	247	1	250	1	255	1

**Table A.8** Energex connection point forecast of summer medium growth native maximum demand

Connection point	Voltage (kV)	Zone	2020/21		2021/22		2022/23		2023/24		2024/25		2025/26		2026/27		2027/28		2028/29		2029/30	
			MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>
Abermain	110	M	71	9	72	9	72	9	72	9	72	9	75	10	75	10	76	10	77	10	78	10
Abermain	33	M	108	15	113	15	118	16	120	17	121	17	121	17	121	17	123	17	124	17	125	17
Algester	33	M	70	15	70	15	69	15	69	15	68	15	68	15	68	15	68	15	68	15	69	15
Ashgrove West	110	M	117	24	119	24	124	25	126	26	127	26	127	26	127	26	127	26	128	26	128	26
Ashgrove West	33	M	75	9	75	9	75	9	75	9	75	9	75	9	74	9	75	9	75	9	76	9
Belmont	110	M	418	102	428	105	430	105	431	105	430	105	430	105	430	105	433	106	436	107	439	107
Blackstone (Raceview)	110	M	102	13	104	13	105	13	106	13	107	13	109	13	110	14	111	14	113	14	115	14
Bundamba	110	M	34	12	35	12	35	12	35	12	35	12	35	12	35	12	35	12	35	12	35	12
Goodna	33	M	135	5	139	5	142	5	144	5	147	5	150	5	153	5	158	5	162	5	167	6
Loganlea	110	M	421	150	424	152	427	153	429	154	430	154	434	155	438	157	447	160	453	162	460	165
Loganlea	33	M	99	7	96	7	96	7	95	7	95	7	95	7	95	7	96	7	96	7	97	7
Middle Ridge (Postmans Ridge and Gatton)	110	M	108	6	109	6	110	6	110	6	109	6	109	6	109	6	110	6	110	6	111	6
Molendinar	110	GC	453	3	455	3	460	3	463	3	466	3	469	3	472	3	479	3	484	3	491	3
Mudgeeraba	110	GC	363	109	364	109	366	109	367	110	367	110	368	110	369	110	373	112	376	112	383	114
Mudgeeraba	33	GC	24	7	24	7	25	7	25	7	25	7	25	7	25	7	25	7	25	7	26	7
Muramie	110	M	534	48	545	49	549	49	560	50	574	51	576	51	576	51	579	52	580	52	582	52
Palmwoods	110 & 132	M	390	146	402	150	408	153	414	155	416	156	422	158	425	159	433	162	443	166	451	169
Redbank Plains	11	M	28	4	29	4	29	4	30	4	30	4	31	4	31	4	32	5	33	5	34	5
Richlands	33	M	119	20	118	20	118	20	117	20	117	20	116	20	116	20	117	20	118	20	119	20
Rocklea	110	M	167	24	161	23	160	23	160	23	160	23	160	23	160	23	161	23	162	23	163	23
Runcom	33	M	59	0	61	0	61	0	61	0	60	0	60	0	60	0	61	0	61	0	62	0
South Pine	110	M	963	89	971	89	975	90	977	90	976	90	979	90	982	90	993	91	1001	92	1012	93

**Table A.8** Energex connection point forecast of summer medium growth native maximum demand (continued)

Connection point	Voltage (kV)	Zone	2020/21		2021/22		2022/23		2023/24		2024/25		2025/26		2026/27		2027/28		2028/29		2029/30	
			MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR
Summer	110	M	35	12	34	12	34	12	34	12	33	12	33	12	33	12	33	12	33	12	33	12
Tennyson	33	M	178	10	181	10	186	10	187	10	189	10	188	10	188	10	189	10	190	10	190	10
Wecker Road	33	M	131	17	131	17	131	17	131	17	130	17	130	17	130	17	131	17	132	18	133	18
Woolooga (Gympie)	132	M	220	1	220	1	220	1	220	1	219	1	219	1	219	1	221	1	222	1	224	1

**Table A.9** Energex connection point forecast of summer low growth native maximum demand

Connection point	Voltage (kV)	Zone	2020/21		2021/22		2022/23		2023/24		2024/25		2025/26		2026/27		2027/28		2028/29		2029/30			
			MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>
Abermain	110	M	70	9	70	9	69	9	68	9	68	9	69	9	69	9	69	9	69	9	69	9	69	9
Abermain	33	M	106	15	109	15	113	16	114	16	113	16	112	15	111	15	111	15	111	15	111	15	111	15
Algester	33	M	69	15	68	15	66	15	65	14	64	14	63	14	62	14	62	14	61	13	61	13	61	13
Ashgrove West	110	M	115	24	116	24	119	24	120	25	119	24	118	24	116	24	116	24	115	23	113	23	113	23
Ashgrove West	33	M	74	9	73	9	72	9	71	9	70	9	69	8	68	8	68	8	67	8	67	8	67	8
Belmont	110	M	412	101	416	102	412	101	408	100	402	99	399	98	394	96	393	96	391	96	387	95	387	95
Blackstone (Raceview)	110	M	100	12	101	12	101	12	101	12	100	12	101	12	100	12	101	12	101	13	101	13	101	13
Bundamba	110	M	34	12	34	12	33	11	33	11	33	11	32	11	32	11	32	11	32	11	31	11	31	11
Goodna	33	M	133	4	135	4	136	5	137	5	137	5	139	5	140	5	143	5	146	5	148	5	148	5
Loganlea	110	M	414	148	413	148	409	146	407	145	402	144	402	144	401	144	406	145	406	145	407	145	407	145
Loganlea	33	M	97	7	93	7	92	7	90	7	89	6	88	6	87	6	87	6	86	6	86	6	86	6
Middle Ridge (Postmans Ridge and Gatto)	110	M	106	6	106	6	105	6	104	6	102	5	101	5	100	5	100	5	99	5	98	5	98	5
Molendinar	110	GC	446	3	443	3	441	3	438	3	436	3	435	3	432	3	435	3	434	3	434	3	434	3
Mudgeeraba	110	GC	357	107	354	106	351	105	348	104	344	103	341	102	338	101	339	101	337	101	338	101	338	101
Mudgeeraba	33	GC	24	7	24	7	24	7	23	7	23	7	23	7	23	7	23	7	23	7	23	7	23	7
Muramie	110	M	526	47	530	47	526	47	531	47	537	48	534	48	527	47	526	47	521	46	514	46	514	46
Palmwoods	110 & 132	M	384	144	391	146	391	146	392	147	389	146	392	147	390	146	393	147	397	149	398	149	398	149
Redbank Plains	11	M	28	4	28	4	28	4	28	4	28	4	28	4	29	4	29	4	30	4	30	4	30	4
Richlands	33	M	117	20	115	19	113	19	111	19	109	18	108	18	106	18	106	18	105	18	105	18	105	18
Rocklea	110	M	164	23	157	22	154	22	152	22	150	21	148	21	147	21	146	21	145	21	144	20	144	20
Runcom	33	M	58	0	59	0	58	0	57	0	57	0	56	0	55	0	55	0	55	0	54	0	54	0
South Pine	110	M	948	87	945	87	934	86	925	85	913	84	908	83	899	83	902	83	898	83	894	82	894	82



**Table A.9** Energex connection point forecast of summer low growth native maximum demand (continued)

Connection point	Voltage (kV)	Zone	2020/21		2021/22		2022/23		2023/24		2024/25		2025/26		2026/27		2027/28		2028/29		2029/30	
			MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR
Summer	110	M	34	12	33	12	32	12	32	11	31	11	31	11	30	11	30	11	29	11	29	10
Tennyson	33	M	175	10	176	10	178	10	178	10	176	10	175	10	172	9	171	9	170	9	168	9
Wecker Road	33	M	129	17	127	17	126	17	124	16	122	16	121	16	119	16	119	16	119	16	118	16
Woolooga (Gympie)	132	M	216	1	214	1	211	1	208	1	205	1	203	1	201	1	201	1	199	1	198	1

Table A.10 Energen connection point forecast of winter high growth native maximum demand

Connection point	Voltage (kV)	Zone	2021		2022		2023		2024		2025		2026		2027		2028		2029		2030	
			MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>
Abermain	110	M	29	6	29	6	29	6	30	6	31	6	32	6	33	6	34	7	35	7	37	7
Abermain	33	M	78	10	85	11	88	11	91	11	92	12	95	12	97	12	100	13	104	13	109	14
Algester	33	M	54	10	54	10	54	10	54	10	55	10	56	10	57	10	58	11	60	11	62	11
Ashgrove West	110	M	117	29	120	30	126	32	131	33	134	34	137	34	139	35	142	36	147	37	153	38
Ashgrove West	33	M	64	1	64	1	64	1	65	1	66	1	67	1	68	1	70	1	72	1	75	2
Belmont	110	M	322	38	329	39	334	39	338	40	343	40	351	41	358	42	367	43	380	44	397	46
Blackstone (Raceview)	110	M	69	10	70	11	71	11	73	11	75	11	78	12	80	12	82	12	86	13	91	14
Bundamba	110	M	31	12	31	12	31	12	32	13	32	13	33	13	34	13	34	14	36	14	37	15
Goodna	33	M	100	0	102	0	104	0	107	0	110	0	115	0	120	0	125	0	132	0	141	0
Loganlea	110	M	312	43	316	44	319	44	325	45	330	46	341	47	352	49	365	51	380	53	401	56
Loganlea	33	M	75	16	75	16	75	16	76	16	77	16	78	17	80	17	82	17	85	18	89	19
Middle Ridge (Postmans Ridge and Gattton)	110	M	102	12	104	12	105	12	106	12	107	13	110	13	112	13	115	13	119	14	124	14
Molendinar	110	GC	395	0	399	0	405	0	412	0	421	0	434	0	445	0	460	0	479	0	504	0
Mudgeeraba	110	GC	276	41	279	42	281	42	285	43	289	43	297	44	304	45	312	47	326	49	341	51
Mudgeeraba	33	GC	19	3	19	3	19	3	19	3	20	3	20	3	21	3	21	4	22	4	23	4
Murarie	110	M	347	35	355	36	360	36	373	38	385	39	396	40	404	41	413	42	426	43	443	45
Palmwoods	110 & 132	M	284	96	296	100	302	102	310	105	316	107	328	111	337	114	349	118	369	125	390	132
Redbank Plains	11	M	20	1	20	1	21	1	21	1	22	1	23	1	24	1	25	1	26	1	28	1
Richlands	33	M	95	12	95	12	94	12	95	12	96	12	98	12	100	12	102	13	106	13	111	14
Rocklea	110	M	109	24	106	24	106	24	107	24	108	24	111	25	113	25	115	26	119	27	124	28
Runcom	33	M	49	0	51	0	51	0	51	0	52	0	53	0	54	0	56	0	58	0	60	0
South Pine	110	M	760	82	769	83	773	83	783	84	795	85	816	88	834	90	858	92	890	96	932	100

**Table A.10** Energex connection point forecast of winter high growth native maximum demand (continued)

Connection point	Voltage (kV)	Zone	2021		2022		2023		2024		2025		2026		2027		2028		2029		2030	
			MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR
Summer	110	M	24	5	24	5	23	5	24	5	24	5	24	5	24	5	25	5	26	5	27	5
Tennyson	33	M	145	11	143	11	149	11	153	11	156	12	159	12	162	12	166	12	172	13	179	13
Wecker Road	33	M	91	5	92	5	92	5	93	6	94	6	96	6	98	6	101	6	105	6	109	7
Woolooga (Gympie)	132	M	302	0	303	0	305	0	308	0	312	0	319	0	325	0	334	0	345	0	362	0

**Table A.11** Energex connection point forecast of winter medium growth native maximum demand

Connection point	Voltage (kV)	Zone	2021		2022		2023		2024		2025		2026		2027		2028		2029		2030	
			MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>
Abermain	110	M	28	5	28	5	28	5	28	5	29	6	29	6	30	6	30	6	31	6	32	6
Abermain	33	M	76	10	82	10	84	11	86	11	86	11	87	11	88	11	90	11	91	12	94	12
Algester	33	M	53	10	52	10	51	9	51	9	51	9	51	9	51	9	52	10	53	10	54	10
Ashgrove West	110	M	114	29	115	29	120	30	123	31	125	31	126	32	127	32	128	32	129	33	131	33
Ashgrove West	33	M	62	1	62	1	61	1	61	1	61	1	62	1	62	1	63	1	64	1	65	1
Belmont	110	M	314	37	318	37	319	37	319	37	319	37	323	38	325	38	329	38	335	39	342	40
Blackstone (Raceview)	110	M	68	10	68	10	68	10	69	10	70	11	71	11	72	11	74	11	76	11	78	12
Bundamba	110	M	30	12	30	12	30	12	30	12	30	12	30	12	31	12	31	12	31	12	32	13
Goodna	33	M	97	0	98	0	100	0	101	0	103	0	106	0	109	0	112	0	117	0	122	0
Loganlea	110	M	304	42	305	42	305	42	306	43	308	43	314	44	320	44	327	45	335	47	345	48
Loganlea	33	M	73	15	73	15	72	15	72	15	71	15	72	15	73	15	74	16	75	16	77	16
Middle Ridge (Postmans Ridge and Gatton)	110	M	100	12	100	12	100	12	100	12	100	12	101	12	102	12	103	12	104	12	106	12
Molendinar	110	GC	385	0	385	0	387	0	389	0	393	0	399	0	405	0	412	0	422	0	434	0
Mudgeeraba	110	GC	269	40	269	40	269	40	269	40	270	40	273	41	276	41	280	42	287	43	294	44
Mudgeeraba	33	GC	18	3	18	3	18	3	18	3	18	3	19	3	19	3	19	3	20	3	20	3
Murarie	110	M	338	34	342	35	344	35	351	36	359	36	364	37	367	37	370	37	375	38	381	39
Palmwoods	110 & 132	M	277	94	285	97	289	98	292	99	294	100	302	102	307	104	313	106	325	110	336	114
Redbank Plains	11	M	19	1	20	1	20	1	20	1	20	1	21	1	21	1	22	1	23	1	24	1
Richlands	33	M	92	11	91	11	90	11	90	11	90	11	90	11	91	11	92	11	94	11	96	12
Rocklea	110	M	106	24	103	23	101	23	101	23	101	23	102	23	102	23	103	23	105	24	107	24
Runcom	33	M	48	0	49	0	49	0	48	0	48	0	49	0	49	0	50	0	51	0	52	0
South Pine	110	M	741	80	742	80	739	79	738	79	740	80	751	81	758	82	769	83	784	84	802	86

**Table A.11** Energex connection point forecast of winter medium growth native maximum demand (continued)

Connection point	Voltage (kV)	Zone	2021		2022		2023		2024		2025		2026		2027		2028		2029		2030	
			MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR
Summer	110	M	23	5	23	5	22	5	22	5	22	5	22	5	22	5	22	5	23	5	23	5
Tennyson	33	M	141	10	138	10	143	11	144	11	145	11	147	11	147	11	149	11	151	11	154	11
Wecker Road	33	M	89	5	89	5	88	5	88	5	88	5	89	5	89	5	90	5	92	5	94	6
Woolooga (Gympie)	132	M	294	0	293	0	291	0	291	0	291	0	293	0	295	0	299	0	304	0	311	0

Table A.12 Energen connection point forecast of winter low growth native maximum demand

Connection point	Voltage (kV)	Zone	2021		2022		2023		2024		2025		2026		2027		2028		2029		2030			
			MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>
Abermain	110	M	27	5	27	5	27	5	26	5	27	5	27	5	27	5	27	5	27	5	27	5	27	5
Abermain	33	M	74	9	80	10	80	10	80	10	80	10	80	10	80	10	79	10	79	10	79	10	79	10
Algerier	33	M	51	9	50	9	49	9	48	9	47	9	47	9	47	9	46	8	46	8	46	8	45	8
Ashgrove West	110	M	111	28	112	28	115	29	116	29	116	29	116	29	114	29	113	28	112	28	112	28	111	28
Ashgrove West	33	M	61	1	60	1	59	1	57	1	57	1	57	1	56	1	55	1	55	1	55	1	55	1
Belmont	110	M	306	36	307	36	304	36	299	35	297	35	297	35	294	34	292	34	290	34	290	34	288	34
Blackstone (Raceview)	110	M	66	10	66	10	65	10	64	10	65	10	66	10	66	10	65	10	66	10	66	10	66	10
Bundamba	110	M	29	12	29	12	29	11	28	11	28	11	28	11	28	11	27	11	27	11	27	11	27	11
Goodna	33	M	95	0	95	0	95	0	95	0	96	0	97	0	99	0	100	0	101	0	101	0	102	0
Loganlea	110	M	296	41	295	41	291	40	287	40	286	40	288	40	289	40	290	40	290	40	290	40	290	40
Loganlea	33	M	71	15	70	15	69	14	67	14	66	14	66	14	66	14	65	14	65	14	65	14	65	14
Middle Ridge (Postmans Ridge and Gatton)	110	M	97	11	97	11	95	11	94	11	93	11	93	11	92	11	91	11	90	11	90	11	90	10
Molendinar	110	GC	375	0	373	0	369	0	364	0	365	0	367	0	366	0	365	0	365	0	365	0	365	0
Mudgeeraba	110	GC	262	39	260	39	256	38	252	38	251	38	251	38	250	37	248	37	249	37	249	37	247	37
Mudgeeraba	33	GC	18	3	18	3	17	3	17	3	17	3	17	3	17	3	17	3	17	3	17	3	17	3
Murarie	110	M	329	33	331	34	328	33	329	33	334	34	335	34	332	34	328	33	325	33	325	33	321	32
Palmwoods	110 & 132	M	270	91	276	94	275	93	274	93	274	93	277	94	277	94	277	94	281	95	281	95	282	96
Redbank Plains	11	M	19	1	19	1	19	1	19	1	19	1	19	1	19	1	20	1	20	1	20	1	20	1
Richlands	33	M	90	11	88	11	86	11	84	10	83	10	83	10	82	10	81	10	81	10	81	10	80	10
Rocklea	110	M	103	23	99	22	97	22	94	21	94	21	94	21	93	21	91	21	91	21	91	20	90	20
Runcorn	33	M	46	0	47	0	46	0	45	0	45	0	45	0	45	0	44	0	44	0	44	0	44	0
South Pine	110	M	722	78	718	77	704	76	692	74	688	74	690	74	686	74	681	73	679	73	679	73	675	73

**Table A.12** Energex connection point forecast of winter low growth native maximum demand (continued)

Connection point	Voltage (kV)	Zone	2021		2022		2023		2024		2025		2026		2027		2028		2029		2030	
			MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR	MW	MVAR
Summer	110	M	23	5	22	5	21	4	21	4	21	4	20	4	20	4	20	4	19	4	19	4
Tennyson	33	M	137	10	133	10	136	10	135	10	135	10	135	10	133	10	132	10	131	10	129	10
Wecker Road	33	M	87	5	86	5	84	5	82	5	81	5	81	5	81	5	80	5	80	5	79	5
Woolooga (Gympie)	132	M	286	0	283	0	278	0	272	0	270	0	270	0	267	0	265	0	263	0	262	0

**Table A.13** Sum of individual summer high growth native peak forecast demands for the transmission connected loads

Connection point (1)	2020/21		2021/22		2022/23		2023/24		2024/25		2025/26		2026/27		2027/28		2028/29		2029/30	
	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>
Transmission connected industrial loads (2)	1,148	377	1,171	388	1,179	392	1,179	392	1,179	392	1,179	392	1,179	392	1,179	392	1,179	392	1,179	392
Transmission connected mining loads (3)	55	16	76	25	96	37	103	42	112	45	122	45	122	48	122	48	122	48	122	48
Transmission connected CSG loads (4)	882	126	894	128	891	128	874	126	859	123	845	121	846	121	830	118	824	118	820	117
Transmission connected rail supply substations (5)(6)	255	-258	255	-258	255	-258	255	-258	255	-258	255	-258	255	-258	255	-258	255	-258	255	-258

Notes:

- (1) Transmission connected customers supply 10-year active power (MW) forecasts. The reactive power (MVA<sub>r</sub>) forecasts are calculated based on historical power factors at each connection point.
- (2) Industrial loads include:  
Ross zone – Invicta Mill, Queensland Nickel and Sun Metals.  
Gladstone zone – BSL, RTA and QAL.
- (3) Mining loads include:  
North zone – Eagle Downs, Goonyella Riverside and North Goonyella.
- (4) CSG loads include:  
Surat zone – Columboola, Orana and Wandoan South.  
Bulli zone – Kumberilla Park.
- (5) Rail supply substations include:  
North zone – Bolingbroke, Coppabella, Mackay Ports, Mindi, Mt McLaren, Oonooie, Peak Downs, Wandoo and Wotonga.  
Central West zone – Blackwater, Bluff, Duaringa, Grantleigh, Gregory, Norwich Park, Raglan and Wycarbah.  
Gladstone zone – Callemondah.
- (6) There are a number of connection points that supply the Aurizon rail network and these individual connection point peaks have been summated. Due to the load diversity between the connection points, the real and reactive power (MW and MVA<sub>r</sub>) coincident peak is significantly lower.



**Table A.14** Sum of individual summer medium growth native peak forecast demands for the transmission connected loads

Connection point (1)	2020/21		2021/22		2022/23		2023/24		2024/25		2025/26		2026/27		2027/28		2028/29		2029/30	
	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>
Transmission connected industrial loads (2)	1,148	377	1,171	388	1,174	389	1,174	389	1,174	389	1,174	389	1,174	389	1,174	389	1,174	389	1,174	389
Transmission connected mining loads (3)	55	16	73	23	87	30	97	37	110	44	110	44	120	47	120	47	120	47	120	47
Transmission connected CSG loads (4)	810	112	834	119	837	121	825	119	816	118	796	115	779	112	774	111	746	109	725	107
Transmission connected rail supply substations (5)(6)	255	-258	255	-258	255	-258	255	-258	255	-258	255	-258	255	-258	255	-258	255	-258	255	-258

**Notes:**

- (1) Transmission connected customers supply 10-year active power (MW) forecasts. The reactive power (MVA<sub>r</sub>) forecasts are calculated based on historical power factors at each connection point.
- (2) Industrial loads include:  
Ross zone – Invicta Mill, Queensland Nickel and Sun Metals.  
Gladstone zone – BSL, RTA and QAL.
- (3) Mining loads include:  
North zone – Eagle Downs, Goonyella Riverside and North Goonyella.
- (4) CSG loads include:  
Surat zone – Columboola, Orana and Wandoan South.  
Bulli zone – Kumberilla Park.
- (5) Rail supply substations include:  
North zone – Boilingbroke, Coppabella, Mackay Ports, Mindi, Mt McLaren, Onoioie, Peak Downs, Wandoo and Wotonga.  
Central West zone – Blackwater, Bluff, Duaringa, Grantleigh, Gregory, Norwich Park, Raglan and Wycarbah.  
Gladstone zone – Callemondah.
- (6) There are a number of connection points that supply the Aurizon rail network and these individual connection point peaks have been summated. Due to the load diversity between the connection points, the real and reactive power (MW and MVA<sub>r</sub>) coincident peak is significantly lower.

**Table A.15** Sum of individual summer low growth native peak forecast demands for the transmission connected loads

Connection point (1)	2020/21		2021/22		2022/23		2023/24		2024/25		2025/26		2026/27		2027/28		2028/29		2029/30	
	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>
Transmission connected industrial loads (2)	1,148	377	1,165	388	1,168	389	1,168	389	1,168	389	1,168	389	1,168	389	1,168	389	1,168	389	1,168	389
Transmission connected mining loads (3)	55	16	68	21	79	27	86	32	97	37	104	40	104	40	104	40	104	40	104	40
Transmission connected CSG loads (4)	810	112	822	119	821	121	810	119	798	118	779	115	763	112	758	111	731	109	711	107
Transmission connected rail supply substations (5)(6)	255	-258	255	-258	255	-258	255	-258	255	-258	255	-258	255	-258	255	-258	255	-258	255	-258

**Notes:**

- (1) Transmission connected customers supply 10-year active power (MW) forecasts. The reactive power (MVA<sub>r</sub>) forecasts are calculated based on historical power factors at each connection point.
- (2) Industrial loads include:  
Ross zone – Invicta Mill, Queensland Nickel and Sun Metals.  
Gladstone zone – BSL, RTA and QAL.
- (3) Mining loads include:  
North zone – Eagle Downs, Goonyella Riverside and North Goonyella.
- (4) CSG loads include:  
Surat zone – Columboola, Orana and Wandoan South.  
Bulli zone – Kumberilla Park.
- (5) Rail supply substations include:  
North zone – Bolingbroke, Coppabella, Mackay Ports, Mindi, Mt McLaren, Oonooie, Peak Downs, Wandoan and Wotonga.  
Central West zone – Blackwater, Bluff, Duaringa, Grantleigh, Gregory, Norwich Park, Raglan and Wycarbah.  
Gladstone zone – Callemondah.
- (6) There are a number of connection points that supply the Aurizon rail network and these individual connection point peaks have been summated. Due to the load diversity between the connection points, the real and reactive power (MW and MVA<sub>r</sub>) coincident peak is significantly lower.

**Table A.16** Sum of individual winter high growth native peak forecast demands for the transmission connected loads

Connection point (1)	2021		2022		2023		2024		2025		2026		2027		2028		2029		2030 (7)	
	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>
Transmission connected industrial loads (2)	1,179	394	1,187	399	1,187	399	1,187	399	1,187	399	1,187	399	1,187	399	1,187	399	1,187	399	1,187	399
Transmission connected mining loads (3)	76	25	96	37	103	42	112	45	112	45	122	48	122	48	122	48	122	48	122	48
Transmission connected CSG loads (4)	851	118	895	128	878	126	860	123	852	122	846	121	833	119	827	118	817	117	806	115
Transmission connected rail supply substations (5)(6)	255	-258	255	-258	255	-258	255	-258	255	-258	255	-258	255	-258	255	-258	255	-258	255	-258

**Notes:**

- (1) Transmission connected customers supply 10-year active power (MW) forecasts. The reactive power (MVA<sub>r</sub>) forecasts are calculated based on historical power factors at each connection point.
- (2) Industrial loads include:  
Ross zone – Invicta Mill, Queensland Nickel and Sun Metals.  
Gladstone zone – BSL, RTA and QAL.
- (3) Mining loads include:  
North zone – Eagle Downs, Goonyella Riverside and North Goonyella.
- (4) CSG loads include:  
Surat zone – Columboola, Orana and Wandoan South.  
Bulli zone – Kumberilla Park.
- (5) Rail supply substations include:  
North zone – Boilingbroke, Coppabella, Mackay Ports, Mindi, Mt McLaren, Onoioie, Peak Downs, Wandoo and Wotonga.  
Central West zone – Blackwater, Bluff, Duaringa, Grantleigh, Gregory, Norwich Park, Raglan and Wycarbah.  
Gladstone zone – Callemondah.
- (6) There are a number of connection points that supply the Aurizon rail network and these individual connection point peaks have been summated. Due to the load diversity between the connection points, the real and reactive power (MW and MVA<sub>r</sub>) coincident peak is significantly lower.
- (7) Connection point loads for winter 2030 have been extrapolated.

**Table A.17** Sum of individual winter medium growth native peak forecast demands for the transmission connected loads

Connection point (1)	2021		2022		2023		2024		2025		2026		2027		2028		2029		2030 (7)	
	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>
Transmission connected industrial loads (2)	1,178	394	1,181	396	1,181	396	1,181	396	1,181	396	1,181	396	1,181	396	1,181	396	1,181	396	1,181	396
Transmission connected mining loads (3)	73	23	87	30	97	37	110	44	110	44	120	47	120	47	120	47	120	47	120	47
Transmission connected CSG loads (4)	794	110	836	119	830	120	821	118	804	116	780	112	780	112	753	110	730	107	709	105
Transmission connected rail supply substations (5)(6)	255	-258	255	-258	255	-258	255	-258	255	-258	255	-258	255	-258	255	-258	255	-258	255	-258

Notes:

- (1) Transmission connected customers supply 10-year active power (MW) forecasts. The reactive power (MVA<sub>r</sub>) forecasts are calculated based on historical power factors at each connection point.
- (2) Industrial loads include:  
Ross zone – Invicta Mill, Queensland Nickel and Sun Metals.  
Gladstone zone – BSL, RTA and QAL.
- (3) Mining loads include:  
North zone – Eagle Downs, Goonyella Riverside and North Goonyella.
- (4) CSG loads include:  
Surat zone – Columboola, Orana and Wandoan South.  
Bulli zone – Kumberilla Park.
- (5) Rail supply substations include:  
North zone – Bolingbroke, Coppabella, Mackay Ports, Mindi, Mt McLaren, Onoioie, Peak Downs, Wandoo and Wotonga.  
Central West zone – Blackwater Bluff, Duaringa, Grantleigh, Gregory, Norwich Park, Raglan and Wycarbah.  
Gladstone zone – Callemondah.
- (6) There are a number of connection points that supply the Aurizon rail network and these individual connection point peaks have been summated. Due to the load diversity between the connection points, the real and reactive power (MW and MVA<sub>r</sub>) coincident peak is significantly lower.
- (7) Connection point: loads for winter 2030 have been extrapolated.

**Table A.18** Sum of individual winter low growth native peak forecast demands for the transmission connected loads

Connection point (1)	2021		2022		2023		2024		2025		2026		2027		2028		2029		2030 (7)	
	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>	MW	MVA <sub>r</sub>
Transmission connected industrial loads (2)	1,178	394	1,180	396	1,180	396	1,180	396	1,180	396	1,180	396	1,180	396	1,180	396	1,180	396	1,180	396
Transmission connected mining loads (3)	73	23	84	29	91	35	101	41	101	41	109	43	109	43	109	43	109	43	109	43
Transmission connected CSG loads (4)	794	110	824	119	815	120	805	118	788	116	765	112	765	112	738	110	717	107	697	105
Transmission connected rail supply substations (5)(6)	255	-258	255	-258	255	-258	255	-258	255	-258	255	-258	255	-258	255	-258	255	-258	255	-258

**Notes:**

- (1) Transmission connected customers supply 10-year active power (MW) forecasts. The reactive power (MVA<sub>r</sub>) forecasts are calculated based on historical power factors at each connection point.
- (2) Industrial loads include:  
Ross zone – Invicta Mill, Queensland Nickel and Sun Metals.  
Gladstone zone – BSL, RTA and QAL.
- (3) Mining loads include:  
North zone – Eagle Downs, Goonyella Riverside and North Goonyella.
- (4) CSG loads include:  
Surat zone – Columboola, Orana and Wandoan South.  
Bulli zone – Kumberilla Park.
- (5) Rail supply substations include:  
North zone – Bolingbroke, Coppabella, Mackay Ports, Mindi, Mt McLaren, Onoole, Peak Downs, Wandoo and Wotonga.  
Central West zone – Blackwater, Bluff, Duaringa, Grantleigh, Gregory, Norwich Park, Raglan and Wycarbah.  
Gladstone zone – Callemondah.
- (6) There are a number of connection points that supply the Aurizon rail network and these individual connection point peaks have been summated. Due to the load diversity between the connection points, the real and reactive power (MW and MVA<sub>r</sub>) coincident peak is significantly lower.
- (7) Connection point loads for winter 2030 have been extrapolated.

