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Powerlink Queensland 2013 - 2017 Revenue Proposal

2012

Summer State Peak 10% PoE

Native Demand, Medium growth outlook Substation

Substation	Zone					Y	ear				
<u>۸</u>		2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Abermain 110kV (Lockrose, Wulkuraka BS and QR)	Μ.	57.5	58.5	58.3	59.9	73.1	75.1	78.1	80.7	82.3	83.8
Abermain 33kV	M	96.7	104.2	115.7	122.5	117.5	139.4	149.9	155.9	158.1	160.3
Alan Sherriff 132kV	R	21.3	22.0	22.8	23.5	24.2	24.9	25.6	26.4	27.1	27.8
Algester 33kV	М	78.5	80.8	80.2	82.2	104.8	106.7 [.]	110.6	113.5	114.9	116.3
Alligator Creek 33kV	N	13.1	13.6	14.2	14.7	15.2	15.8	16.3	16.9	17.4	17.9
Ashgrove West 33kV	M	80.4	81.3	78.7	81.2	82.3	84.4	87.9	90.8	92.5	94.2
Belmont 110kV (Cleveland and Capalaba North)	M	166.5	173.8	179.5	186.3	189.6	196.3	205.1	212.9	217.9	222.8
Biloela 66kV	CW	32.1	33.7	33.9	34.1	34.3	34.5	34.7	34.9	35.1	35.3
Blackwater 66kV	CW	93.4	114.0	115.6	117.2	118.7	120.3	121.9	123.5	125.1	126.6
Bowen North	R	27.0	27.2	27.4	27.4	33.1	33.1	38.6	38.6	38.6	38.6
Broadlea 66kV	Ν	0.0	0.0	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3
Bundamba 110kV	M	43.0	44.0	44.1	45.6	46.4	47.7	49.8	51.6	52.7	53.8
Cairns 22kV	FN	78.4	81.2	83.9	86.6	89.4	92.1	94.7	97.4	100.1	102.7
Cairns City 132kV	FN	55.0	56.6	61.8	63.4	64.9	66.4	67.9	69.4	70.8	72.3
Cairns North 132kV	FN	33.1	34.1	35.1	36.2	37.3	38.5	39.7	40.9	42.2	43.4
Cardwell 22kV	R	3.9	4.0	4.0	4.1	4.2	4.2	4.3	4.3	4.4	4.4
CBD East 110kV	М	431.9	443.4	521.1	578.4	586.3	620.3	640.5	660.7	670.2	679.6
CBD South 110kV	M	67.4	62.2	63.0	88.6	90.4	93.3	97.8	101.7	104.3	106.9
CBD West 110kV	M	145.2	146.0	162.7	176.4	179.2	170.5	179.5	187.6	193.1	198.6
Clare 66kV	R	70.1	70.9	71.7	72.5	73.4	74.2	75.0	75.9	76.7	77.5
Collinsville 33kV	N	15.4	15.5	15.5	15.6	15.7	15.8	15.9	16.0	16.1	16.2
Dan Gleeson	R	90.6	93.3	96.1	98.7	101.5	104.4	106.9	109.9	112.8	115.8
Dysart 66kV	CW	47.4	59.9	60.5	61.0	61.6	62.1	62.7	63.2	63.8	64.4
Edmonton 22kV	FN	41.5	43.0	44.5	46.0	47.5	49.0	50.5	52.0	53.5	55.0
Egans Hill 66kV	CW	43.9	48.5	49.8	51.0	53.2	54.4	55.6	56.8	58.0	59.2
El Arish 22kV	FN	3.5	3.6	3.7	3.8	3.9	4.0	4.2	4.3	4.4	4.5
Garbutt 66kV	R	89.5	93.1	99.0	101.8	105.1	108.0	111.3	114.3	117.4	120.6
Gin Gin 132kV (Bundaberg)	WB	104.4	105.9	107.4	108.9	110.3	111.7	113.0	114.4	115.8	117.2
Yarwun - Boat Ck	GL	45.9	46.6	48.4	48.4	56.3	56.3	56.5	56.5	56.5	56.5
Gladstone North 132kV	GL	13.5	19.1	19.3	22.2	22.3	33.0	33.1	33.2	33.4	33.5
Gladstone South 66kV	GL	73.1	75.3	77.4	79.6	81.8	83.9	86.1	88.3	90.4	92.6
Goodna 33kV	M	88.9	103.3	125.3	139.2	117.5	122.8	135.0	141.6	146.3	151.0
Ingham 66kV	R	19.7	24.1	24.5	25.0	25.4	25.9	26.3	26.8	27.3	27.8
Innisfail 22kV	FN	27.8	28.1	28.5	28.8	29.1	29.4	29.7	30.0	30.3	30.6
Kamerunga 22kV	FN	52.4	54.5	56.6	58.7	60.8	63.0	65.1	67.2	69.3	71.4
Larapinta 33kV	M	0.0	0.0	0.0	0.0	0.0	33.9	35.5	38.5	40.9	43.3

Summer State Peak 10% PoE

Native Demand, Medium growth outlook

Substation	Zone Year					2 ²²					
	5	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Lilyvale 132kV (Clermont and Barcaldine)	CW	42.9	43.5	44.0	44.6	45.1	45.7	46.2	46.8	47.3	47.9
Lilyvale 66kV	CW	92.5	111.6	118.3	121.1	122.4	123.8	125.1	127.5	128.8	130.2
Loganlea 110kV	M	547.0	536.1	546.8	561.8	582.3	573.9	611.2	647.7	675.9	704.0
Loganlea 33kV	M	111.4	113.3	112.8	115.8	116.9	122.0	126.5	130.2	130.2	130.3
Mackay 33kV	N	70.8	72.5	74.1	75.8	77.4	79.0	80.6	82.2	83.8	85.5
Middle Ridge 110kV	SW	243.3	250.8	259.3	270.8	274.1	280.9	288.7	295.5	302.4	309.3
Middle Ridge 110kV (Postmans Ridge and Gatton)	M	59.8	62.8	81.0	82.4	82.3	83.2	85.1	86.5	86.8	87.1
Molendinar 110kV	GC	422.2	456.7	453.2	470.7	485.3	501.4	518.1	530.3	539.2	548.1
Moranbah 66kV and 11kV	N	119.8	119.3	55.6	72.5	84.1	84.5	84.9	85.3	85.7	86.1
Moura 66kV	CW	38.5	40.0	40.4	48.6	49.0	49.4	49.8	50.2	50.6	51.0
Mudgeeraba 110kV	GC .	337.2	344.6	343.3	353.4	360.2	370.9	387.3	400.6	408.7	416.9
Murarrie 110kV (Doboy, Lytton BS and QR, and Wakerley)	M	291.1	297.4	300.2	306.4	313.2	325.7	344.8	356.1	359.7	363.4
Nebo 11kV	Ν	2.3	2.4	2.5	2.6	2.7	2.8	2.9	2.9	3.0	3.1
Newlands 66kV	N	22.7	26.0	26.2	26.3	26.4	26.5	26.7	26.8	26.9	27.1
Palmwoods 132kV and 110kV	M	353.5	368.0	387.9	423.6	454.4	487.3	518.0	543.9	553.1	562.2
Pandoin 66kV	CW	49.8	51.4	54.8	56.5	58.1	59.9	61.6	63.5	65.4	67.3
Pioneer Valley 66kV	N	54.6	56.3	58.0	59.8	61.5	63.2	65.0	66.8	68.5	70.3
Proserpine 66kV	N	46.5	48.8	50.8	53.0	55.0	57.2	59.4	61.7	64.0	66.2
Redbank Plains 11kV	M	25.0	26.6	19.1	20.5	21.7	22.9	24.6	26.3	27.6	29.0
Richlands 33kV	M	111.1	112.8	114.6	120.8	122.8	125.4	131.1	135.0	137.0	139.1
Rockhampton 66kV	CW	84.8	88.8	92.2	97.4	100.1	102.8	105.4	108.0	110.6	113.1
Rocklea 110kV (Archerfield)	M	104.9	107.0	106.3	109.2	84.2	86.1	89.4	92.1	93.6	95.1
Ross 132kV (Kidston, Milchester and Georgetown)	FN	39.5	46.7 .	50.0	50.8	51.6	52.5	53.3	54.1	55.0	55.8
Runcorn 33kV	M	74.6	73.7	73.4	75.4	71.9	72.9	75.0	76.6	88.7	100.7
South Pine 110kV	Μ	1055.9	1111.5	1127.3	1179.2	1201.1	1233.6	1281.9	1323.4	1351.3	1379.3
Sumner 11kV	M	50.6	51.5	51.4	52.9	53.6	54.9	57.1	58.9	59.9	61.0
Sun Water Pumps 132kV (King Creek)	N	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Sun Water Pumps 132kV (Stony Creek)	N	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Swanbank 110kV (Raceview)	M	103.4	102.2	103.3	106.5	138.8	151.5	161.3	175.7	187.5	199.2
Tangkam 110kV (Dalby and Oakey)	SW	54.6	56.1	58.6	60.1	61.6	63.2	64.7	66.2	67.8	69.3
Tarong 132kV (Chinchilla and Roma)	SW	84.0	87.9	89.2	90.7	92.2	93.8	95.3	96.8	98.4	99.9
Tarong 66kV (Wide Bay)	SW	41.0	42.3	43.3	44.3	45.3	46.3	47.4	48.4	49.4	50.4
Teebar Creek 132kV (Isis and Maryborough)	WB	158.3	165.5	171.0	177.2	182.9	188.8	194.2	200.1	204.9	209.6
Tennyson 33kV	Μ	207.1	234.0	208.1	206.2	208.8	199.0	206.7	213.2	216.8	220.3
Townsville East 66kV	R	38.6	39.8	41.0	42.2	43.4	44.7	45.8	47.2	48.5	49.8
Townsville South 66kV	R	68.0	73.0	75.3	77.5	80.1	82.4	84.3	87.5	89.7	92.0

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Summer State Peak 10% PoE

Native Demand, Medium growth outlook

Substation	Zone						Y	ear				
			2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Tully 22kV	R		15.1	15.4	15.6	15.9	16.2	16.5	16.8	17.0	17.3	17.6
Turkinje 132kV (Craiglee and Lakeland)	FN		17.7	18.0	18.2	18.5	18.7	19.0	19.2	19.5	19.7	20.0
Turkinje 66kV	FN	15 at 19	60.0	61.3	62.6	63.9	65.3	66.6	67.9	69.2	70.5	71.8
Waggamba 132kV (Bulli Creek)	В		18.7	18.9	19.1	19.3	19.5	19.6	19.8	20.0	20.2	20.4
Wecker Road 33kV (Belmont)	M		194.9	200.8	182.3	153.4	160.9	165.5	172.6	178.8	182.6	186.4
Woolooga 132kV (Gympie)	M		206.1	207.0	207.8	214.3	220.4	226.0	239.5	257.2	269.7	282.3
Woolooga 132kV (Kilkivan)	WB		12.9	13.2	13.4	13.7	13.9	14.1	14.4	14.6	14.8	15.0
Transmission Grid Connected Queensland Rail Substations			121.0	141.9	168.3	169.2	169.4	169.7	170.1	170.4	170.7	171.0
Direct Connected Industrial Loads												an an su

Transmission Grid Connected Mining Loads

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TOTAL

9379 9753 10252 10907 11450 11984 12437 12799 13113 13427

Winter Peak 10% PoE

Native Demand, Medium growth outlook

Substation	Zone)	ear				
p.		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Abermain 110kV (Lockrose, Wulkuraka BS and QR)	M	50.6	50.5	50.7	52.3	53.9	64.8	65.8	68.0	69.8	71.6
Abermain 33kV	M	80.5	82.8	86.0	96.4	102.2	113.5	118.8	124.9	128.7	131.6
Alan Sherriff 132kV	R	12.3	12.5	12.7	12.9	13.1	13.3	13.4	13.6	13.8	14.0
Algester 33kV	M	67.3	68.2	68.3	70.1	72.1	85.4	85.8	88.1	89.9	91.7
Alligator Creek 33kV	N	10.7	11.2	11.7	12.2	12.7	13.1	13.6	14.1	14.6	15.1
Ashgrove West 33kV	M	78.9	78.8	79.1	79.1	81.8	83.0	83.9	86.6	89.0	91.3
Belmont 110kV (Cleveland and Capalaba North)	Μ	155.2	156.5	164.1	170.5	177.0	180.3	184.4	191.3	197.4	203.6
Biloela 66kV	CW	27.9	28.0	29.7	29.9	30.1	30.2	30.4	30.6	30.8	30.9
Blackwater 66kV	CW	70.8	85.5	105.2	106.3	107.5	108.7	109.8	111.0	112.2	113.3
Bowen North	R	0.0	22.4	22.6	22.7	22.7	27.5	27.5	32.1	32.1	32.1
Broadlea 66kV	N	0.0	0.0	0.0	50.2	50.2	50.2	50.2	50.2	50.2	50.2
Bundamba 110kV	M	39.5	39.9	40.4	41.8	43.4	44.2	44.8	46.4	47.8	49.2
Cairns 22kV	FN	45.4	45.5	45.5	45.6	45.6	45.6	45.6	45.6	45.6	45.6
Cairns City 132kV	FN	33.1	34.2	35.4	38.6	39.7	40.7	41.8	42.9	43.9	45.0
Cairns North 132kV	FN	20.0	20.6	21.2	21.9	22.6	23.3	24.0	24.8	25.5	26.3
Cardwell 22kV	R	2.8	2.9	3.0	3.1	3.2	3.2	3.3	3.4	3.5	3.6
CBD East 110kV	Μ	287.0	304.5	303.0	378.5	434.2	439.1	457.6	466.4	478.5	489.1
CBD South 110kV	M	39.7	35.9	36.4	38.1	59.3	60.4	61.5	63.8	65.9	68.0
CBD West 110kV	M	85.5	100.6	100.0	116.5	126.5	128.5	120.1	125.5	130.3	135.1
Clare 66kV	R	47.4	46.0	46.9	47.8	48.7	49.6	50.5	51.4	52.3	53.2
Collinsville 33kV	Ν	9.6	11.2	11.3	11.3	11.3	11.4	11.4	11.4	11.4	11.5
Dan Gleeson	R	57.5	58.3	58.8	59.3	59.9	60.4	60.9	61.5	62.0	62.5
Dysart 66kV	CW	42.2	42.7	53.5	54.0 [°]	54.4	54.9	55.4	55.8	56.3	56.7
Edmonton 22kV	FN	20.0	20.7	21.4	22.1	22.9	23.6	24.3	25.0	-25.8	26.5
Egans Hill 66kV	CW	47.0	33.3	37.8	38.3	38.7	40.0	40.4	40.8	41.1	41.5
El Arish 22kV	FN	2.2	2.3	2.4	2.4	2.5	2.6	2.7	2.7	2.8	2.9
Garbutt 66kV	R	65.3	66.4	67.8	70.9	71.7	72.8	73.6	74.9	75.7	76.5
Gin Gin 132kV (Bundaberg)	WB	90.5	92.4	94.3	96.3	98.3	100.2	102.1	103.9	105.8	107.6
Yarwun - Boat Ck	GL	36.6	42.5	43.1	44.8	44.8	52.3	52.3	52.6	52.6	52.6
Gladstone North 132kV	GL	12.6	12.7	18.1	18.3	21.1	21.2	31.4	31.5	31.6	31.8
Gladstone South 66kV	GL	60.6	62.5	64.1	65.7	67.3	68.9	70.4	72.0	73.6	75.2
Goodna 33kV	M	70.7	74.4	86.2	108.8	121.0	105.0	108.2 [.]	118.6	123.8	129.1
Ingham 66kV	R	11.8	11.8	15.3	15.4	15.4	15.5	15.6	15.6	15.7	15.7
Innisfail 22kV	FN	18.9	19.1	19.2	19.3	19.5	19.6	19.7	19.9	20.0	20.1
Kamerunga 22kV	FN	34.3	35.6	36.8	38.1	39.3	40.6	41.8	43.1	44.3	45.6
Larapinta 33kV	M	0.0	0.0	0.0	0.0	0.0	0.0	28.2	29.3	32.5	35.1

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Winter Peak 10% PoE

Native Demand, Medium growth outlook

Substation	Zone				24		<i>lear</i>				
		2010	2011	2012	2013	2014	2015	2016	· 2017	2018	2019
Lilyvale 132kV (Clermont and Barcaldine)	CW	24.5	32.1	32.2	32.4	32.5	32.7	32.8	33.0	33.1	33.3
Lilyvale 66kV	CW	92.1	94.3	116.2	124.6	128.0	129.7	131.4	133.1	136.0	137.7
Loganlea 110kV	M	446.0	462.0	456.0	481.4	500.1	518.3	505.1	534.5	563.9	596.0
Loganlea 33kV	M	90.5	97.4	97.9	100.7	103.7	104.7	107.6	110.6	113.1	113.6
Mackay 33kV	N	73.1	44.5	45.1	45.6	46.2	46.7	47.2	47.7	48.3	48.8
Middle Ridge 110kV	SW	234.1	248.6	256.5	265.5	275.5	281.8	289.1	297.3	304.6	312.0
Middle Ridge 110kV (Postmans Ridge and Gatton)	M	48.5	53.3	55.1	75.7	76.8	76.7	76.5	77.6	78.4	79.1
Molendinar 110kV	GC	337.7	339.8	358.4	370.3	385.7	397.0	406.0	416.3	422.2	432.8
Moranbah 66kV and 11kV	N	100.1	108.3	107.7	47.6	63.4	74.2	74.5	74.7	75.0	75.3
Moura 66kV	CW	36.5	36.9	38.3	38.7	46.8	47.1	47.5	47.9	48.3	48.7
Mudgeeraba 110kV	GC	326.5	328.3	329.8	339.4	350.5	357.6	363.3	377.4	387.9	398.4
Murarrie 110kV (Doboy, Lytton BS and QR, and Wakerley)	M	236.6	245.3	249.5	258.1	263.9	270.2	277.2	292.6	301.0	306.5
Nebo 11kV	N	1.7	1.8	1.8	1.9	1.9	2.0	2.0	2,1	2.1	2.2
Newlands 66kV	N	18.4	18.6	21.4	21.5	21.7	21.9	22.0	22.2	22.3	22.5
Palmwoods 132kV and 110kV	M	319.1	329.2	343.5	372.8	405.5	437.4	461.6	485.6	501.5	518.5
Pandoin 66kV	CW	0.0	43.3	44.8	48.1	49.5	51.0	52.5	54.0	55.6	57.3
Pioneer Valley 66kV	N	6.4	36.7	37.8	38.9	40.0	41.1	42.1	43.2	44.3	45.4
Proserpine 66kV	N	42.0	26.5	27.6	28.4	29.5	30.3	31.4	32.4	33.5	34.5
Redbank Plains 11kV	M	22.3	22.2	23.4	17.1	18.4	19.5	20.4	21.7	23.0	24.4
Richlands 33kV	M	81.2	82.9	83.3	87.3	92.2	93.7	94.4	97.9	100.2	102.5
Rockhampton 66kV	CW	85.4	60.5	62.9	64.9	67.7	69.0	70.2	71.4	72.5	73.7
Rocklea 110kV (Archerfield)	Μ.	78.0	77.6	77.9	80.1	82.7	67.6	68.3	70.4	72.3	74.1
Ross 132kV (Kidston, Milchester and Georgetown)	FN	25.3	25.8	31.8	34.3	34.8	35.2	35.6	36.1	36.5	37.0
Runcorn 33kV	M	60.2	60.5	58.8	60.7	62.6	59.6	59.7	61.0	62.1	72.5
South Pine 110kV	M	880.1	870.2	935.1	980.9	1028.9	1047.2	1061.6	1096.6	1125.9	1157.8
Sumner 11kV	Μ	31.8	35.9	36.1	37.3	38.5	39.1	39.5	40.7	41.8	42.8
Sun Water Pumps 132kV (King Creek)	N	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Sun Water Pumps 132kV (Stony Creek)	N	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Swanbank 110kV (Raceview)	M	75.2	77.8	73.9	77.5	80.2	105.3	115.0	122.9	134.6	146.1
Tangkam 110kV (Dalby and Oakey)	SW	43.7	45.1	46.0	47.5	48.5	49.4	50.4	51.3	52.3	53.2
Tarong 132kV (Chinchilla and Roma)	SW	64.6	70.5	73.6	74.3	75.3	76.2	77.1		79.0	80.0
Tarong 66kV (Wide Bay)	SW	39.8	40.9	42.3	43.1	43.9	44.7	45.6	46.4	47.2	48.0
Teebar Creek 132kV (Isis and Maryborough)	WB	135.4	142.2	148.4	153.5	159.0	164.2	169.3	174.3	179.7	184.2
Tennyson 33kV	Μ.,	188.3	201.7	209.9	189.7	188.3	175.6	176.1	181.5	186.0	190.5
Townsville East 66kV	R	23.0	23.2	23.4	23.6	23.8	24.1	24.3	24.5	24.7	24.9
Townsville South 66kV	R	43.4	44.1	45.9	46.5	47.1	47.9	48.3	48.7	49.9	50.3

Powerlink 2010 Demand Forecast

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Winter Peak 10% PoE

Native Demand, Medium growth outlook

Substation	Zone										
12 B 0		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Tully 22kV	R	8.9	9.1	9.3	9.4	9.6	9.7	9.9	10.0	10.2	10.3
Turkinje 132kV (Craiglee and Lakeland)	FN	14.3	14.6	15.0	15.3	15.6	15.9	16.3	16.6	16.9	17.3
Turkinje 66kV	FN	39.0	42.9	42.9	43.0	43.1	43.2	43.3	43.3	43.4	43.5
Waggamba 132kV (Bulli Creek)	В	15.0	15.2	15.3	15.5	15.7	15.8	16.0	16.1	16.3	16.5
Wecker Road 33kV (Belmont)	М	174.0	184.8	188.1	177.4	141.9	148.9	151.3	156.6	161.5	166.3
Woolooga 132kV (Gympie)	M	190.2	193.3	194.2	204.7	210.6	214.2	216.5	227.7	245.9	255.9
Woolooga 132kV (Kilkivan)	WB	14.5	14.8	15.0	15.3	15.6	15.9	16.2	16.5	16.8	17.0
Transmission Grid Connected Queensland Rail Substations		120.4	113.5	134.9	159.7	160.6	160.8	161.0	161.3	161.5	161.8
Direct Connected Industrial Loads											

Transmission Grid Connected Mining Loads

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TOTAL	7788	8007 836	3 8905	9505	10006 10410	10753	11017 11332

Summer State Peak 50% PoE

Native Demand, Medium growth outlook Substation

Substation	Zone	Year									
		2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Abermain 110kV (Lockrose, Wulkuraka BS and QR)	Μ	53.9	54.7	54.6	56.1	68.4	70.3	73.1	75.6	77.0	78.5
Abermain 33kV	M	90.6	97.6	108.3	114.7	110.0	130.6	140.4	146.0	148.1	150.1
Alan Sherriff 132kV	R	20.3	20.9	21.6	22.3	23.0	23.7	24.4	25.1	25.7	26.4
Algester 33kV	Μ	73.5	75.6	75.1	77.0	98.1	99.9	103.5	106.3	107.6	108.9
Alligator Creek 33kV	N	12.7	13.2	13.7	14.2	14.7	15.3	15.8	16.3	16.8	17.3
Ashgrove West 33kV	M	75.3	76.2	73.7	76.0	77.1	79.0	82.3	85.0	86.6	88.2
Belmont 110kV (Cleveland and Capalaba North)	Μ	155.9	162.8	168.1	174.4	177.6	183.8	192.1	199.4	204.0	208.7
Biloela 66kV	CW	31.4	33.0	33.2	33.4	33.6	33.8	34.0	34.2	34.4	34.6
Blackwater 66kV	CW	91.5	111.6	113.2	114.7	116.3	117.8	119.4	120.9	122.5	124.0
Bowen North	R	25.7	25.9	26.0	26.0	31.4	31.4	36.7	36.7	36.7	36.7
Broadlea 66kV	Ν	0.0	0.0	53.3	53.3	53.3	53.3	53.3	53.3	53.3	53.3
Bundamba 110kV	M	40.3	41.2	41.3	42.7	43.5	44.7	46.6	48.3	49.3	50.4
Cairns 22kV	FN	75.0	77.7	80.3	82.9	85.5	88.1	90.6	93.2	95.7	98.3
Cairns City 132kV	FN	52.6	54.1	59.1	60.6	62.1	63.5	65.0	66.4	67.8	69.2
Cairns North 132kV	FN	31.6	32.6	33.6	34.6	35.7	36.8	38.0	39.1	40.4	41.6
Cardwell 22kV	R	3.8	3.8	3.9	3.9	4.0	4.0	4.1	4.1	4.2	4.3
CBD East 110kV	M	404.4	415.2	488.0	541.6	549.0	580.9	599.8	618.7	627.6	636.4
CBD South 110kV	M	63.1	58.2	59.0	82.9	84.7	87.4	91.5	95.2	97.7	100.1
CBD West 110kV	M	136.0	136.8	152.3	165.1	167.8	159.6	168.1	175.7	180.8	186.0
Clare 66kV	R	66.6	67.4	68.2	68.9	69.7	70.5	71.3	72.1	72.9	73.7
Collinsville 33kV	N	14.6	14.7	14.8	14.9	14.9	15.0	15.1	15.2	15.3	15.4
Dan Gleeson	R	86.1	88.7	91.3	93.8	96.4	99.2	101.6	104.4	107.2	110.1
Dysart 66kV	CW	46.4	58.7	59.2	59.8	60.3	60.8	61.4	61.9	62.5	63.0
Edmonton 22kV	FN	39.7	41.1	42.6	44.0	45.5	46.9	48.3	49.8	51.2	52.7
Egans Hill 66kV	CW	43.0	47.5	48.7	50.0	52.1	53.3	54.5	55.6	56.8	57.9
El Arish 22kV	FN	3.3	3.4	3.5	3.6	3.8	3.9	4.0	4.1	4.2	4.3
Garbutt 66kV	R	85.1	88.5	94.1	96.7	99.8	102.7	105.7	108.6	111.6	114.6
Gin Gin 132kV (Bundaberg)	WB	99.8	101.2	102.6	104.1	105.4	106.7	108.0	109.3	110.6	112.0
Yarwun - Boat Ck	GL	45.0	45.6	47.4	47.4	55.1	55.1	55.4	55.4	55.4	55.4
Gladstone North 132kV	GL	13.2	18.7	18.9	21.7	21.9	32.3	32.4	32.5	32.7	32.8
Gladstone South 66kV	GL	71.6	73.7	75.8	77.9	80.1	82.2	84.3	86.4	88.5	90.7
Goodna 33kV	М	83.3	96.7	117.3	130.4	110.0	115.0	126.4	132.6	137.0	141.4
Ingham 66kV	R	18.7	22.9	23.3	23.7	24.1	24.6	25.0	25.5	25.9	26.4
Innisfail 22kV	FN	26.6	26.9	27.2	27.5	27.8	28.1	28.4	28.7	29.0	29.3
Kamerunga 22kV	FN	50.1	52.2	54.2	56.2	58.2	60.2	62.2	64.3 .	66.3	68.3
Larapinta 33kV	М	0.0	0.0	0.0	0.0	0.0	31.7	33.3	36.0	38.3	40.5

Powerlink 2010 Demand Forecast

Summer State Peak 50% PoE

Native Demand, Medium growth outlook

Substation	Zone	Year										
		2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	
Lilyvale 132kV (Clermont and Barcaldine)	CW	42.0	42.5	43.1	43.6	44.2	44.7	45.2	45.8	46.3	46.9	
Lilyvale 66kV	CW	90.6	109.2	115.9	118.5	119.9	121.2	122.5	124.8	126.1	127.4	
Loganlea 110kV	M	512.2	502.0	512.1	526.0	545.3	537.4	572.4	606.5	632.9	659.2	
Loganlea 33kV	М	104.3	106.1	105.6	108.4	109.5	114.3	118.4	121.9	121.9	122.0	
Mackay 33kV	N	68.5	70.1	71.7	73.3	74.8	76.4	78.0	79.5	81.1	82.6	
Middle Ridge 110kV	SW	229.1	236.1	244.1	255.0	258.0	264.5	271.8	278.2	284.7	291.2	
Middle Ridge 110kV (Postmans Ridge and Gatton)	М	56.0	58.8	75.9	77.2	77.1	77.9	79.7	81.0	81.3	81.6	
Molendinar 110kV	GC	395.3	427.7	424.4	440.7	454.4	469.5	485.1	496.6	504.9	513.2	
Moranbah 66kV and 11kV	Ν	119.8	119.3	55.6	72.5	84.1	84.5	84.9	85.3	85.7	86.1	
Moura 66kV	CW	37.7	39.1	39.5	47.6	48.0	48.4	48.8	49.2	49.6	50.0	
Mudgeeraba 110kV	GC	315.8	322.7	321.5	330.9	337.3	347.3	362.7	375.2	382.8	390.4	
Murarrie 110kV (Doboy, Lytton BS and QR, and Wakerley)	Μ.	272.6	278.5	281.1	286.9	293.3	305.0	322.9	333.4	336.9	340.3	
Nebo 11kV	N	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.8	2.9	3.0	
Newlands 66kV	N	21.6	24.8	24.9	25.0	25.1	25.3	25.4	25.5	25.6	25.8	
Palmwoods 132kV and 110kV	M	331.0	. 344.6	363.2	396.7	425.5	456.3	485.0	509.3	517.9	526.5	
Pandoin 66kV	CW	48.8	50.3	53.7	55.3	56.9	58.6	60.4	62.2	64.0	65.9	
Pioneer Valley 66kV	N	52.8	54.4	56.1	57.8	59.5	61.2	62.9	64.6	66.3	68.0	
Proserpine 66kV	N '	44.9	47.2	49.1	51.2	53.1	55.3	57.4	59.6	61.8	63.9	
Redbank Plains 11kV	M	23.4	24.9	17.8	19.2	20.3	21.5	23.1	24.6	25.9	27.1	
Richlands 33kV	M	104.0	105.6	107.3	113.1	115.0	117.4	122.7	126.4	128.3	130.2	
Rockhampton 66kV	CW	83.0	86.9	90.3	95.3	98.0	100.6	103.2	105.7	108.2	110.7	
Rocklea 110kV (Archerfield)	M	98.3	100.2	99.5	102.2	78.9	80.6	83.7	86.3	87.7	89.1	
Ross 132kV (Kidston, Milchester and Georgetown)	FN	37.6	44.5	47.6	48.4	49.2	50.0	50.8	51.6	52.3	53.1	
Runcorn 33kV	M	69.8	69.0	68.7	70.6	67.3	68.2	70.2	71.7	83.0	94.3	
South Pine 110kV	M	988.8	1040.8	1055.6	1104.2	1124.7	1155.1	1200.4	1239.2	1265.4	1291.6	
Sumner 11kV	M	47.4	48.2	48.1	49.6	50.2	51.4	53.4	55.2	56.1	57.1	
Sun Water Pumps 132kV (King Creek)	N	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	
Sun Water Pumps 132kV (Stony Creek)	N	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Swanbank 110kV (Raceview)	M	96.8	95.7	96.7	99.7	130.0	141.8	151.1	164.5	175.5	186.5	
Tangkam 110kV (Dalby and Oakey)	SW	51.4	52.8	55.1	56.6	58.0	59.5	60.9	62.3	63.8	65.2	
Tarong 132kV (Chinchilla and Roma)	SW	79.1	82.8	83.9	85.4	86.8	88.3	89.7	91.2	92.6	94.0	
Tarong 66kV (Wide Bay)	SW	39.2	40.4	41.4	42.4	43.3	44.3	45.2	46.2	47.2	48.1	
Teebar Creek 132kV (Isis and Maryborough)	WB	151.3	158.1	163.4	169.3	174.8	180.4	185.6	191.2	195.8	200.3	
Tennyson 33kV	M	193.9	219.2	194.9	193.1	195.5	186.4	193.6	199.6	203.0	206.3	
Townsville East 66kV	R	36.7	37.8	39.0	40.1	41.3	42.5	43.6	44.8	46.1	47.3	
Townsville South 66kV	R	64.6	69.4	71.6	73.7	76.2	78.3	80.1	83.1	85.3	87.4	

Summer State Peak 50% PoE

Native Demand, Medium growth outlook

Substation	Zone	Year										
14		2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	
Tully 22kV	R	14.4	14.7	15.0	15.2	15.5	15.8	16.0	16.3	16.6	16.8	
Turkinje 132kV (Craiglee and Lakeland)	FN	17.0	17.2	17.4	17.7	17.9	18.2	18.4	18.6	18.9	19.1	
Turkinje 66kV	FN	57.4	58.7	59.9	61.2	62.4	63.7	64.9	66.2	67.5	68.7	
Waggamba 132kV (Bulli Creek)	в	17.6	17.8	17.9	18.1	18.3	18.5	18.7	18.9	19.1	19.3	
Wecker Road 33kV (Belmont)	M	182.5	188.0	170.7	143.7	150.7	155.0	161.6	167.5	171.0	174.6	
Woolooga 132kV (Gympie)	M	193.0	193.8	194.6	200.7	206.3	211.6	224.3	240.8	252.6	264.4	
Woolooga 132kV (Kilkivan)	WB	12.3	12.6	12.8	13.1	13.3	13.5	13.7	13.9	14.1	14.4	
Transmission Grid Connected Queensland Rail Substations		117.3	137.6	163.5	164.3	164.5	164.8	165.2	165.6	165.8	166.1	
Direct Connected Industrial Loads							10110	100.4	100.0	100.0	100.1	

Transmission Grid Connected Mining Loads

TOTAL		a e	8924	9280	9765	10400	10930	11447	11877	12219	12520	12821
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Winter Peak 50% PoE

Native Demand, Medium growth outlook

Substation	Zone		Year								
	12	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Abermain 110kV (Lockrose, Wulkuraka BS and QR)	М	49.9	49.8	50.0	51.5	53.1	63.9	64.9	67.0	68.8	70.6
Abermain 33kV	M	79.4	81.6	84.8	95.0	100.8	111.9	117.1	123.1	126.9	129.7
Alan Sherriff 132kV	R	12.0	12.2	12.4	12.6	12.8	12.9	13.1	13.3	13.5	13.7
Algester 33kV	M	66.3	67.3	67.3	69.1	71.1	84.2	84.6	86.8	88.6	90.4
Alligator Creek 33kV	N	10.5	11.0	11.5	11.9	12.4	12.9	13.4	13.8	14.3	14.8
Ashgrove West 33kV	M	77.7	77.6	78.0	78.0	80.6	81.8	82.7	85.4	87.7	90.0
Belmont 110kV (Cleveland and Capalaba North)	Μ	153.0	154.3	161.8	168.0	174.5	177.7	181.8	188.6	194.6	200.7
Biloela 66kV	CW	27.5	27.7	29.3	29.5	29.7	29.8	30.0	30.2	30.4	30.5
Blackwater 66kV	CW	69.9	84.4	103.8	105.0	106.1	107.3	108.4	109.6	110.7	111.9
Bowen North	R	0.0	21.9	22.0	22.2	22.2	26.8	26.8	31.3	31.3	31.3
Broadlea 66kV	N	0.0	0.0	0.0	50.2	50.2	50.2	50.2	50.2	50.2	50.2
Bundamba 110kV	M	38.9	39.3	39.8	41.3	42.8	43.5	44.2	45.8	47.1	48.5
Cairns 22kV	FN	44.5	44.6	44.7	44.7	44.7	44.8	44.8	44.8	44.8	44.7
Cairns City 132kV	FN	32.5	33.6	34.7	37.8	38.9	40.0	41.0	42.1	43.1	44.1
Cairns North 132kV	FN	19.6	20.2	20.8	21.5	22.1	22.8	23.5	24.3	25.0	25.8
Cardwell 22kV	R	2.8	2.9	2.9	3.0	3.1	3.2	3.3	3.3	3.4	3.5
CBD East 110kV	Μ	282.9	300.2	298.7	373.2	428.0	432.8	451.1	459.8	471.7	482.1
CBD South 110kV	M	39.1	35.4	35.8	37.5	58.4	59.6	60.6	62.9	65.0	67.1
CBD West 110kV	M	84.3	99.2	98.6	114.8	124.7	126.7	118.3	123.7	128.4	133.2
Clare 66kV	R	46.3	44.9	45.8	46.7	47.5	48.4	49.3	50.2	51.1	52.0
Collinsville 33kV	Ń	9.4	11.0	. 11.0	11.0	11.1	11.1	11.1	11.1	11.2	11.2
Dan Gleeson	R	56.1	56.9	57.4	58.0	58.5	59.0	59.5	60.0	60.6	61.1
Dysart 66kV	CW	41.7	42.1	52.8	53.3	53.7	54.2	54.6	55.1	55.6	56.0
Edmonton 22kV	FN	19.6	20.3	21.0	21.7	22.4	23.1	23.8	24.5	25.3	26.0
Egans Hill 66kV	CW	46.4	32.8	37.3	37.8	38.2	39.5	39.9	40.2	40.6	40.9
El Arish 22kV	FN	2.2	2.3	. 2.3	2.4	2.5	2.5	2.6	2.7	2.8	2.8
Garbutt 66kV	R	63.8	64.9	66.2	69.2	70.0	71.1	71.9	73.2	73.9	74.7
Gin Gin 132kV (Bundaberg)	WB	88.8	90.7	92.6	94.5	96.5	98.4	100.2	102.0	103.8	105.7
Yarwun - Boat Ck	GL	36.1	41.9	42.5	44.2	44.2	51.6	51.6	51.9	51.9	51.9
Gladstone North 132kV	GL	12.4	12.6	17.9	18.0	20.8	20.9	31.0	31.1	31.2	31.4
Gladstone South 66kV	GL	59.8	61.7	63.3	64.8	66.4	68.0	69.5	71.1	72.7	74.2
Goodna 33kV	M	69.7	73.4	85.0	107.2	119.3	103.5	106.7	116.9	122.0	127.3
Ingham 66kV	R	11.5	11.6	15.0	15.0	15.1	15.1	15.2	15.2	15.3	15.4
Innisfail 22kV	FN	18.6	18.7	18.8	19.0	19.1	19.2	19.4	19.5	19.6	19.7
Kamerunga 22kV	FN	33.7	34.9	36.1	37.4	38.6	39.8	41.0	42.3	43.5	44.7
Larapinta 33kV	M	0.0	0.0	0.0	0.0	0.0	0.0	27.8	28.9	32.1	34.6

Winter Peak 50% PoE

Native Demand, Medium growth outlook

Substation	Zone				Year		<u>,</u> *.				
		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Lilyvale 132kV (Clermont and Barcaldine)	CW	24.2	31.6	31.8	31.9	32.1	32.2	32.4	32.5	32.7	32.8
Lilyvale 66kV	CW	90.9	93.1	114.7	123.0	126.4	128.0	129.7	131.3	134.2	135.9
Loganlea 110kV	M	439.7	455.4	449.5	474.5	493.0	511.0	497.9	526.9	555.9	587.5
Loganlea 33kV	M	89.2	96.0	96.5	99.3	102.2	103.2	106.0	109.0	111.5	112.0
Mackay 33kV	N	71.7	43.7	44.2	44.8	45.3	45.8	46.3	46.8	47.4	47.9
Middle Ridge 110kV	SW	227.4	241.6	249.3	258.0	267.8	273.9	281.0	288.9	296.0	303.2
Middle Ridge 110kV (Postmans Ridge and Gatton)	M	47.7	52.5	54.2	74.5	75.6	75.5	75.3	76.4	77.2	77.9
Molendinar 110kV	GC	332.9	335.0	353.3	365.0	380.2	391.3	400.3	410.4	416.2	426.7
Moranbah 66kV and 11kV	N	100.1	108.3	107.7	47.6	63.4	74.2	74.5	74.7	75.0	75.3
Moura 66kV	CW	36.0	36.4	37.8	38.2	46.2	46.5	46.9	47.3	47.7	48.1
Mudgeeraba 110kV	GC	321.8	323.6	325.2	334.6	345.5	352.5	358.1	372.0	382.4	392.7
Murarrie 110kV (Doboy, Lytton BS and QR, and Wakerley)	М	233.3	241.8	245.9	254.5	260.1	266.4	273.3	288.5	296.7	302.1
Nebo 11kV	N	1.7	1.7	1.8	1.8	1.9	1.9	· 2.0	2.0	2.1	2.1
Newlands 66kV	N	18.0	18.1	20.9	21.0	21.2	21.4	21.5	21.7	21.8	22.0
Palmwoods 132kV and 110kV	M	314.6	324.6	338.6	367.5	399.8	431.2	455.0	478.6	494.4	511.1
Pandoin 66kV	CW	0.0	42.7	44.2	47.5	48.9	50.3	51.8	53.3	54.9	56.5
Pioneer Valley 66kV	. N	6.3	36.0	37.1	38.2	39.2	40.3	41.4	42.4	43.5	44.6
Proserpine 66kV	N	41.2	26.0	27.1	27.9	28.9	29.8	30.8	31.8	32.8	33.9
Redbank Plains 11kV	M	22.0	21.9	23.0	16.9	18.2	19.2	- 20.1	21.4	22.7	24.1
Richlands 33kV	М	80.1	81.7	82.1	86.1	90.9	92.3	93.1	96.5	98.8	101.1
Rockhampton 66kV	CW	84.3	59.7	62.1	64.0	66.8	68.1	69.3	70.5	71.6	72.7
Rocklea 110kV (Archerfield)	M	76.9	76.5	76.8	79.0	81.5	66.6	67.3	69.4	71.2	73.1
Ross 132kV (Kidston, Milchester and Georgetown)	FN	24.7	25.2	31.1	33.6	34.0	34.4	34.9	35.3	35.7	36.2
Runcorn 33kV	М	59.3	59.6	58.0	59.8	61.7	58.8	58.8	60.2	61.2	71.5
South Pine 110kV	М	867.5	857.9	921.8	966.9	1014.3	1032.3	1046.5	1081.0	1109.8	1141.3
Sumner 11kV	M	31.4	35.4	35.6	36.8	38.0	38.5	38.9	40.1	41.2	42.2
Sun Water Pumps 132kV (King Creek)	N	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Sun Water Pumps 132kV (Stony Creek)	N	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Swanbank 110kV (Raceview)	М	74.2	76.7	72.9	76.4	79.0	103.8	113.4	121.1	132.7	144.0
Tangkam 110kV (Dalby and Oakey)	SW	42.5	43.8	44.7	46.2	47.1	48.0	49:0	49.9	50.8	51.7
Tarong 132kV (Chinchilla and Roma)	SW	62.8	68.5	71.6	72.2	73.1	74.0	75.0	75.9	76.8	77.7
Tarong 66kV (Wide Bay)	SW	39.0	40.2	41.5	42.3	43.1	43.9	44.7	45.5	46.4	47.2
Teebar Creek 132kV (Isis and Maryborough)	WB	133.0	139.6	145.7	150.7	156.1	161.2	166.2	171.1	176.4	180.9
Tennyson 33kV	M	185.6	198.9	206.9	187.0	185.6	173.1	173.6	178.9	183.4	187.8
Townsville East 66kV	R	22.4	22.7	22.9	23.1	23.3	23.5	23.7	23.9	24.1	24.4
Townsville South 66kV	R	42.4	43.1	44.8	45.4	46.0	46.8	47.2	47.6	48.7	49.1

Powerlink 2010 Demand Forecast

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Winter Peak 50% PoE

Native Demand, Medium growth outlook

Zone	Year									
	2010	2011	2012	2013	. 2014	2015	2016	2017	2018	2019
R	8.8	8.9	9.1	9.2	9.4	9.5	9.7	9.8	10.0	10.1
FN	14.0	14.4	14.7	15.0	15.3	15.6	16.0	16.3	16.6	16.9
FN	38.2	42.0	42.1	42.2	42.3	42.4	42.4	42.5	42.6	42.7
В	14.6	14.8	14.9	15.1	15.2	15.4	15.5	15.7	15.8	16.0
М	171.5	182.1	185.4	174.9	139.9	146.8	149.1	154.4	159.2	163.9
M	187.5	190.5	191.4	201.8	207.6	211.1	213.4	224.5	242.4	252.2
WB	14.2	14.5	14.8	15.1	15.3	15.6	15.9	16.2	16.4	16.7
3	118.4	111.6	132.7	157.2	158.0	158.2	158.4	158.7	158.9	159.2
	R FN FN M M	2010 R 8.8 FN 14.0 FN 38.2 B 14.6 M 171.5 M 187.5 WB 14.2	2010 2011 R 8.8 8.9 FN 14.0 14.4 FN 38.2 42.0 B 14.6 14.8 M 171.5 182.1 M 187.5 190.5 WB 14.2 14.5	201020112012R8.88.99.1FN14.014.414.7FN38.242.042.1B14.614.814.9M171.5182.1185.4M187.5190.5191.4WB14.214.514.8	2010201120122013R8.88.99.19.2FN14.014.414.715.0FN38.242.042.142.2B14.614.814.915.1M171.5182.1185.4174.9M187.5190.5191.4201.8WB14.214.514.815.1	20102011201220132014R8.88.99.19.29.4FN14.014.414.715.015.3FN38.242.042.142.242.3B14.614.814.915.115.2M171.5182.1185.4174.9139.9M187.5190.5191.4201.8207.6WB14.214.514.815.115.3	201020112012201320142015R8.88.99.19.29.49.5FN14.014.414.715.015.315.6FN38.242.042.142.242.342.4B14.614.814.915.115.215.4M171.5182.1185.4174.9139.9146.8M187.5190.5191.4201.8207.6211.1WB14.214.514.815.115.315.6	2010201120122013201420152016R8.88.99.19.29.49.59.7FN14.014.414.715.015.315.616.0FN38.242.042.142.242.342.442.4B14.614.814.915.115.215.415.5M171.5182.1185.4174.9139.9146.8149.1M187.5190.5191.4201.8207.6211.1213.4WB14.214.514.815.115.315.615.9	20102011201220132014201520162017R8.88.99.19.29.49.59.79.8FN14.014.414.715.015.315.616.016.3FN38.242.042.142.242.342.442.442.5B14.614.814.915.115.215.415.515.7M171.5182.1185.4174.9139.9146.8149.1154.4M187.5190.5191.4201.8207.6211.1213.4224.5WB14.214.514.815.115.315.615.916.2	201020112012201320142015201620172018R8.88.99.19.29.49.59.79.810.0FN14.014.414.715.015.315.616.016.316.6FN38.242.042.142.242.342.442.442.542.6B14.614.814.915.115.215.415.515.715.8M171.5182.1185.4174.9139.9146.8149.1154.4159.2M187.5190.5191.4201.8207.6211.1213.4224.5242.4WB14.214.514.815.115.315.615.916.216.4

Transmission Grid Connected Mining Loads

TOTAL

7683 7900 8251 8788 9383 9880 10282 10621 10881 11193