



Appendix T

Establishing a Proxy Historical Cost Valuation of Easement Compensation

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ElectraNet

Establishing a proxy historical cost valuation of easement compensation

17 May 2007

Capital Value and the engagement team

- Capital Value is a specialist valuation practice with offices in Melbourne and Adelaide. The engagement team working on this assignment are:
- **Michael Churchill (Director)**
 - Twenty years' experience in business valuations of all types for purchase/sale, capital raising, regulatory and dispute-related purposes. Significant experience in the valuation of businesses in the infrastructure sector for corporatisation, capital management, regulatory and merger/acquisition purposes including SA Ports Corp, SA Water Corp, Telstra, UeComm, Tarong Energy, Sunwater, Transurban and Gold Coast Water. Experience in project evaluation, contributed/gifted assets, economic valuation, financial structure advice, pricing reviews, CSO identification and quantification, stakeholder value analysis and opex/capex optimisation
- **Professor Bob Officer (Consultant)**
 - Corporate finance specialist and expert in returns, valuation and cost of capital of regulated businesses. Consulted to a large number of public, private and government organisations on topics encompassing economics and finance generally. Specific areas include corporate and international finance, valuation and investment appraisal, foreign exchange management, capital markets, industrial organization, takeovers, and anti-trust. Provision of expert witness testimony before the Federal Court, Arbitration Commission, Supreme Court, Trade Practices Tribunal, and a number of other bodies of enquiry or arbitration.
- **Ian Burrows (Consultant)**
 - Over 20 years experience of advising a range of stakeholders in privately and publicly owned public utility businesses in relation to the regulatory, financial and commercial issues including financial reporting, business and asset valuation, pricing strategies, access regulation and operations management. Regulatory and economic valuations (including, in some instances, economic and technical optimisation in assessing ODRC values) of Western Power Corporation (generation, transmission and distribution), Origin Energy (generation), Transfield (generation), Alinta (generation, gas transmission and distribution), TXU (electricity and gas generation and distribution), Transco (Philippines, transmission)
- **Haydn Reynolds (Consultant)**
 - Financial analyst and performance monitoring expert with experience across a variety of infrastructure types including electricity distribution asset performance modelling (Estonian/Norwegian Electricity Distribution Project, NT Power and Water Corp and NESÅ (Denmark)). Significant contribution to performance monitoring and asset management for utilities, with, and/or on behalf of COAG, ARMCANZ, GTE Performance Monitoring Steering Committee and WSAA.

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The purpose of this report is ...

1. To propose a robust methodology for establishing, in the absence of detailed records, a proxy historical cost representing the amount paid by ElectraNet to land owners as compensation for acquiring transmission line easements over their land.
2. Propose a proxy historical cost valuation of easement compensation in line with the above methodology.

Background

- ElectraNet does not have records that allow it to adequately establish the costs of compensation paid to landowners for the acquisition of easement rights for its transmission network.
- In its 2001 revenue cap application ElectraNet used a hybrid deprivation model to value easements. In the draft decision the Australian Competition and Consumer Commission (ACCC) rejected this approach as it *“prefers to value easements on actual costs suitably indexed for timing differences”*.
- Subsequently the Statement of Regulatory Principles (SRP) has been published which states, in relation to easements:

“A variant on the historical cost approach is to use a benchmark approach. This would establish benchmarked costs for Transmission Network Service Providers’ (TNSP) easements based on its own records for those TNSPs with relatively complete records, and then impute a value to cover easements for which records are unavailable or incomplete. This approach would provide the additional benefit of delivering values for TNSPs which lack historical records. This approach would also maintain consistency between the valuations methods used for TNSPs.”

- The ACCC in a letter of 3 August 2004 to ElectraNet stated that:
“the ACCC would consider revaluation of ElectraNet’s asset base if ElectraNet was able to establish that such a step accords with the reasonable expectations of ElectraNet’s investors.”
- This position has been confirmed in the Australian Energy Market Commission’s Revenue Rule clause 11.6.13 (b) that states:

“in establishing the opening regulatory asset base for ElectraNet for the regulatory control period subsequent to ElectraNet’s current regulatory control period, the Australian Energy Regulator may also consider adjustments to the regulatory asset base for ElectraNet that relate to easements, as agreed by letter dated 3 August 2004, between the ACCC and ElectraNet.”

Sources of data

The bases for establishing the proposed methodology are:

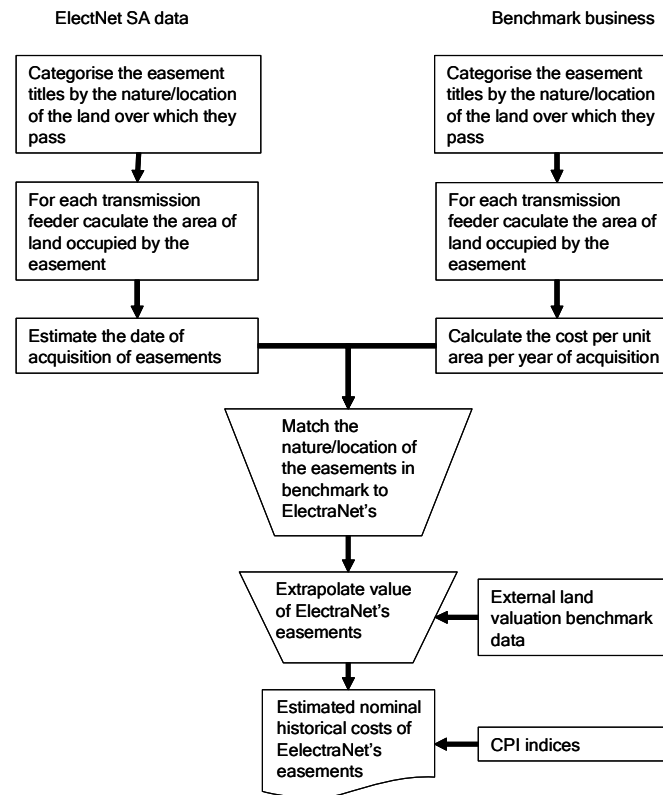
1. The Statement of Regulatory Principles requires ElectraNet to establish its proxy historical costs adopting a benchmark approach based on its own records by benchmarking this data to those TNSPs with relatively complete records, and then impute a value to cover easements for which records are unavailable or incomplete
2. The extent of available independent and reliable data sources for the value of land that allows this benchmarking to be completed.

Based upon these principles the methodology has been developed using the following independent and reliable data:

- Historical cost of easement data from the Victorian TNSP, SPI PowerNet (now SP AusNet). This data formed the basis of the historical cost estimates used by ACCC in SPI PowerNet's 2002 pricing determination.
- The Australian Bureau of Agricultural and Resource Economics (ABARE), identifies a range of statistical information including the value of land and improvements by geographic location for the period 1990 to 2005. The ABARE statistics for Victoria are divided into the following 4 locations Mallee, Wimmera, Central North and South/Eastern Victoria. No information is available for metropolitan and urban areas. The Australian Bureau of Statistics provides information on the (nominal) value of residential, rural commercial and other land by state/territory for the period 1984 to 2006.

Overview of methodology

- The methodology used to estimate a proxy historical cost of acquiring easements is based upon the Statement of Regulatory Principles “A variant on the historical cost approach is to use a benchmark approach”.
- An overview of the proposed methodology for estimating the proxy historical cost paid by ElectraNet for land compensation for easements acquired is as follows:



Methodology detail

- ElectraNet easement information:
 - Remove the extent of the route that is over crown land for which easements would have been acquired at no cost.
 - Calculate the area of easement under each title (with the assumed width of easement as a variable, for earlier 132kV lines).
 - Estimate the date of acquisition of the easement based upon the date the transmission line was energised, the lead-time for acquisition being a variable.
- SPI PowerNet easement information:
 - Remove the extent of the route that was over crown land for which easements would have been acquired at no cost.
 - Eliminate potential cost anomalies by grouping costs across a number of years.
 - From the identified year of acquisition calculate the cost per unit area of easement by ABARE's geographic regions and ABS categories
- ABARE data:
 - Ascertain the relative values of land between Victoria and South Australia for each ABARE geographic region for each available year.
- Australian Bureau of Statistics:
 - Ascertain the relative values of land between Victoria and South Australia for each ABS land category for each available year.

Methodology detail (continued)

- Process
 - Apply the established relationships between the land values in Victoria and South Australia via the independent data sources and apply it to the SPI PowerNet information to calculate a range of proxy costs for ElectraNet.

Key Assumptions

- Land related compensation for easements over land is deemed to be related to the value of the land over which the easement passes.
- The ABARE data relates to the value of land and improvements, Using this data assumes that the costs of improvements are broadly the same in both Victoria and South Australia and therefore the differences in values relate to the land. Using this data two scenarios of the proxy historical cost were estimated; the average and median change in values from Victoria to South Australia. (Appendix E)
- The Australian Bureau of Statistics data provided the nominal values of land distinguishing values for residential, commercial, rural and other land. (Appendix F)
- Transmission line routes are, in general, across rural land.
- The independent data sources do not provide information relating to the entire period of time over which easements have been acquired by the two businesses (SPI PowerNet from 1921, ElectraNet from 1950). The methodology assumes that the cost of land relationships established for the data sources is equally valid for the period earlier than the available data.

Easement valuation

- The following sets (1-4) of valuation outcomes identify the practical range of potential outcomes from the current model adopting the following variants:
 - The assumed lead-time between commissioning and easement acquisition of (and)
 - The cost relationship assumed between Victoria and SA applied to the Adelaide Region.
- The valuation outcome sets are as follows (Victorian to SA Regional cost relationships as shown):
 - Set 1: 1-year easement lead-time; Adelaide = ABARE's South East costs.
 - Set 2: 1-year easement lead-time; Adelaide = ABS SA: Victoria Urban Costs.
 - Set 3: 3-year easement lead-time; Adelaide = ABARE's South East costs.
 - Set 4: 3-year easement lead-time; Adelaide = ABS SA: Victoria Urban Costs.

Easement valuation (continued)

- **Set 1:** 1-year easement lead-time; Adelaide = South East costs.

	ABARE Median Values	ABARE Average Values	ABARE Trend Values	ABS Values
	\$m (2002)	\$m (2002)	\$m (2002)	\$m (2002)
South East	15.84	15.69	14.98	12.51
Murray Lands & Yorke Peninsula	9.20	9.20	8.99	10.61
Eyre Peninsula	0.55	0.61	0.65	1.81
Northern Pastoral	0.04	0.04	0.04	3.16
Adelaide	2.88	2.85	2.73	2.27
Total	28.51	28.39	27.39	30.36

Easement valuation (continued)

- **Set 2:** 1-year easement lead-time; Adelaide = ABS SA:Victoria Urban Costs.

	ABARE Median Values	ABARE Average Values	ABARE Trend Values	ABS Values
	\$m (2002)	\$m (2002)	\$m (2002)	\$m (2002)
South East	15.84	15.69	14.99	12.51
Murray Lands & Yorke Peninsula	9.20	9.20	8.99	10.61
Eyre Peninsula	0.55	0.61	0.65	1.81
Northern Pastoral	0.04	0.04	0.04	3.16
Adelaide	1.22	1.22	1.22	1.22
Total	26.85	26.76	25.89	29.31

Easement valuation (continued)

- **Set 3:** 3-year easement lead-time; Adelaide = South East costs.

	ABARE Median Values	ABARE Average Values	ABARE Trend Values	ABS Values
	\$m (2002)	\$m (2002)	\$m (2002)	\$m (2002)
South East	15.83	15.67	14.96	12.50
Murray Lands & Yorke Peninsula	9.98	9.98	9.75	11.51
Eyre Peninsula	0.61	0.69	0.73	2.03
Northern Pastoral	0.03	0.03	0.03	2.36
Adelaide	2.89	2.86	2.74	2.28
Total	29.34	29.23	28.21	30.68

Easement valuation (continued)

- **Set 4:** 3-year easement lead-time; Adelaide = ABS SA:Victoria Urban Costs.

	ABARE Median Values	ABARE Average Values	ABARE Trend Values	ABS Values
	\$m (2002)	\$m (2002)	\$m (2002)	\$m (2002)
South East	15.83	15.66	14.97	12.50
Murray Lands & Yorke Peninsula	9.98	9.98	9.75	11.51
Eyre Peninsula	0.61	0.69	0.73	2.03
Northern Pastoral	0.03	0.03	0.03	2.36
Adelaide	1.23	1.23	1.23	1.23
Total	27.68	27.59	26.71	29.63

Conclusion

- For the proxy historical cost estimates in Sets 1 to 4 inclusive (totalling 16 individual cases):
 - The average proxy historical costs of ElectraNet's easements as at 30 June 2002 is \$28.283 Million
 - The median proxy historical costs of ElectraNet's easements as at 30 June 2002 is \$28.285 Million

Appendix A Easement data provided by SPI PowerNet

Field	Comments
Easement area (imperial measurements)	This was converted to hectares
Year of acquisition	Dates ranged from 1921 to 1994.
Comment	Identified easements over Crown land

Appendix B ElectraNet's easements data (1)

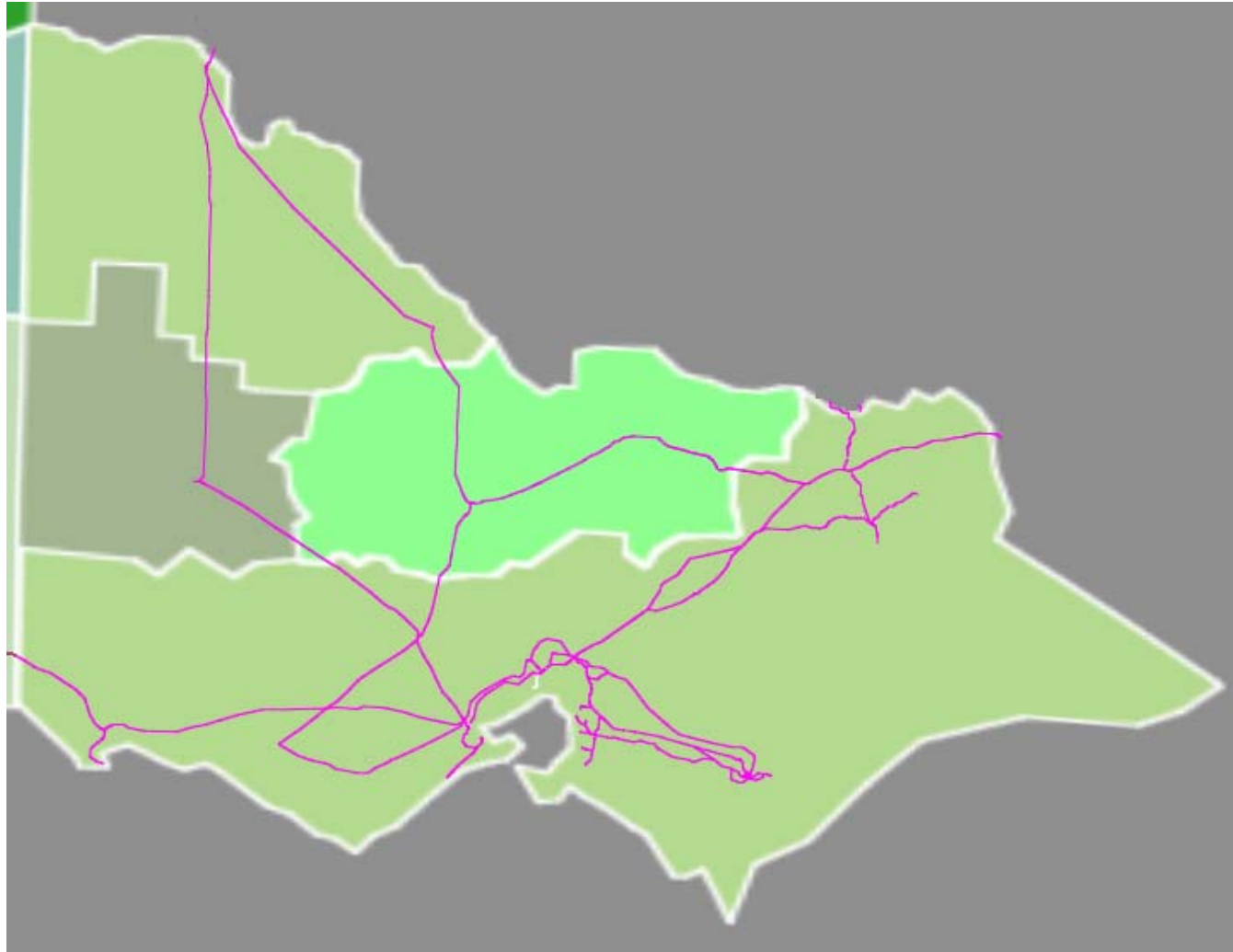
TSNumber	Name	Voltage	Length Circuit	Length Route	FreeLeasehold Circuit Length	FreeLeasehold Route Length
1701	NEW OSBORNE - OCPL #1	66	0.15	0.08	0.00	0.00
1702	NEW OSBORNE - OCPL #2	66	0.15	0.08	0.00	0.00
1703	New Osborne - Lefevre	66	1.96	0.98	2.05	1.02
1704	MONASH - BERRI	66	3.64	3.64	3.64	3.64
1705	TIPS NORTH - TIPS No1	66	0.01	0.01	0.00	0.00
1706	TIPS NORTH - TIPS No2	66	0.01	0.01	0.00	0.00
1712	TIPS - OSBORNE No.1	66	3.81	2.21	1.06	0.61
1713	TIPS - LeFevre	66	4.60	4.02	1.42	1.24
1714	TIPS - OSBORNE No.3	66	3.12	1.86	1.28	0.77
1715	TIPS - OSBORNE No.4	66	3.12	1.86	1.31	0.78
1801	YADNARIE - WUDINNA	132	120.30	120.30	120.29	120.29
1802	BUNGAMA - PORT PIRIE	132	6.30	6.30	6.33	6.33
1803	HUMMOCKS - ARDROSSAN WEST	132	42.96	42.96	43.37	43.37
1804	BRINKWORTH - MINTARO	132	45.80	45.80	45.69	45.69
1805	MINTARO - WATERLOO	132	16.59	16.59	16.60	16.60
1806	ROBERTSTOWN - WATERLOO No.2 (Mor-Why No.4 Pump to Waterloo)	132	17.30	17.30	17.45	17.45
1807	NORTH WEST BEND - Monash No.2 (formerly part North West Bend-Berri No. 2 132kV)	132	91.70	91.70	86.17	86.17
1808	PLAYFORD - WHYALLA TERMINAL No.1	132	69.20	69.20	57.75	57.75
1809	PLAYFORD - WHYALLA TERMINAL No.2	132	70.20	70.20	59.19	59.19
1810	WHYALLA TERMINAL - YADNARIE	132	133.72	133.72	136.77	136.77
1811	YADNARIE - PORT LINCOLN	132	130.20	130.20	126.33	126.33
1812	PLAYFORD - PIMBA	132	175.90	175.90	175.21	175.21
1813	PLAYFORD - LEIGH CREEK	132	250.60	250.60	232.30	232.30
1814	PLAYFORD - BAROOTA	132	55.50	55.50	55.88	55.88
1815	PLAYFORD - BUNGAMA	132	85.01	85.01	84.84	84.84
1816	BUNGAMA - HUMMOCKS	132	100.10	100.10	100.29	100.29
1817	AETC - NORTHFIELD	132	101.52	101.52	0.00	0.00
1818	BRINKWORTH - BUNGAMA	132	55.70	55.70	57.10	57.10
1819	ROBERTSTOWN - WATERLOO No.1	132	26.37	13.18	26.08	13.04
1820	NORTH WEST BEND - Monash No.1 (formerly part North West Bend-Berri No. 1 132kV)	132	92.00	92.00	87.83	87.83
1821	WATERLOO - TEMPLERS	132	55.70	55.70	55.62	55.62
1822	PARA - Roseworthy (formerly part Para - TEMPLERS)	132	23.96	22.96	23.96	22.96
1823	PARA - NORTHFIELD	132	16.90	15.90	17.00	15.99
1824	CHERRY GARDENS - CHERRY GARDENS	132	0.19	0.19	0.27	0.27
1825	CHERRY GARDENS - MOUNT BARKER	132	19.80	19.80	19.89	19.89
1826	MT BARKER - MOBILONG (Mt Barker to MBr-Hahn No.3 Pump)	132	18.99	18.99	18.93	18.93
1827	TAILEM BEND - KEITH No.2	132	120.84	120.84	121.35	121.35
1828	KEITH - KINCRAIG	132	104.58	104.58	104.67	104.67
1829	SOUTH EAST - MOUNT GAMBIER	132	13.80	13.80	14.04	14.04
1830	NORTHFIELD - ANGAS CREEK (including Milbrook Tee)	132	30.54	30.54	30.67	30.67
1831	Kincraig-Penola West	132	61.30	59.45	61.29	59.44
1832	ANGAS CREEK - MANNUM (includes No.2 & No.3 Man-Adel Pumps)	132	32.32	32.32	32.50	32.50
1833	MANNUM - MANNUM ADELAIDE Pump Station No.1	132	4.13	4.13	4.15	4.15
1834	MANNUM - MOBILONG	132	16.25	16.25	16.65	16.65
1835	MOBILONG - TAILEM BEND	132	32.20	32.20	32.37	32.37
1836	TAILEM BEND - KEITH No.1	132	121.16	121.16	120.80	120.80
1837	KEITH - SNUGGERY	132	184.00	184.00	179.10	179.10
1838	BLANCHE - SNUGGERY	132	43.30	40.05	43.38	40.12
1839	BLANCHE - MOUNT GAMBIER	132	16.70	13.45	17.07	13.75
1840	PLAYFORD P S - NORTHERN P S TIE	132	0.51	0.51	0.79	0.79
1841	HUMMOCKS - KADINA EAST	132	39.60	39.60	39.59	39.59
1842	TEMPLERS - DORRIEN	132	19.50	19.50	18.48	18.48
1843	CULTANA - WHYALLA TERMINAL	132	10.65	10.65	9.96	9.96
1844	CULTANA - STONY POINT	132	24.45	24.45	18.75	18.75
1845	MOBILONG - MURRAY BR - HAHNDORF No.1 Pump Station	132	4.04	4.04	4.05	4.05

Appendix B ElectraNet's easements data (2)

TSNumber	Name	Voltage	Length Circuit	Length Route	FreeLeasehold Circuit Length	FreeLeasehold Route Length
1846	ROBERTSTOWN - NORTH WEST BEND No. 1	132	60.47	59.24	60.17	58.94
1847	ROBERTSTOWN - NWBEND No.2 (Robertstown to Mor-Why No.3 Pump)	132	6.88	6.88	5.98	5.98
1848	ARDROSSAN WEST - DALRYMPLE	132	62.50	62.50	66.12	66.12
1849	ROBERTSTOWN - NWBEND No.2 (No.3 to No.2 Mor-Why Pumps)	132	22.10	22.10	22.05	22.05
1850	MT BARKER - MOBILONG (MBr.-Hahn No.3 Pump to Kanmantoo Mine)	132	4.80	4.80	4.39	4.39
1851	MT BARKER - MOBILONG (No.3 to No.2 MBr-Hahn Pumps)	132	18.70	18.70	18.54	18.54
1852	MT BARKER - MOBILONG (MBr-Hahn No.2 Pump to Mobilong)	132	6.08	6.08	6.07	6.07
1853	ROBERTSTOWN - NWBEND No.2 (No.2 to No.1 Mor-Why Pumps)	132	25.20	25.20	25.07	25.07
1854	ROBERTSTOWN - NWBEND No.2 (Mor-Why No.1 Pump to NW Bend)	132	4.80	4.80	5.11	5.11
1855	ROBERTSTOWN - WATERLOO No.2 (Robertst'n to Mor-Why No.4 Pump)	132	6.38	6.38	7.19	7.19
1856	BAROOTA - BUNGAMA	132	26.20	26.20	26.16	26.16
1857	PIMBA - WOOMERA	132	12.40	12.40	12.43	12.43
1858	PIMBA - OLYMPIC DAM	132	93.20	93.20	93.20	93.20
1859	PLAYFORD A & B SWITCHYARD TIE No.1	132	0.16	0.16	0.19	0.19
1860	PLAYFORD A & B SWITCHYARD TIE No.2	132	0.27	0.27	0.29	0.29
1861	Hummocks - Waterloo	132	83.13	83.13	83.12	83.12
1862	Olympic West - Olympic North # 1	132	2.50	2.50	1.32	1.32
1863	Olympic West - Olympic North # 2	132	2.50	2.50	1.34	1.34
1864	Penola West-South East	132	36.80	34.95	24.40	23.17
1865	Monash - Berri No. 1 (formerly part North West Bend-Berri No. 1 132kV)	132	3.64	3.64	3.61	3.61
1866	Monash - Berri No. 2 (formerly part North West Bend-Berri No. 2 132kV)	132	3.64	3.64	6.79	6.79
1867	ROSEWORTHY - TEMPLERS (formerly part Para Templers 1822)	132	9.60	9.60	9.65	9.65
1901	Pelican Point - PARAFIELD GDNS WEST	275	13.56	6.78	6.39	3.19
1902	TIPS - PARA No.4	275	20.97	10.48	18.27	9.14
1903	TIPS - CHERRY GARDENS	275	66.37	55.94	64.41	54.29
1904	PARA - TALEM BEND No.2	275	101.57	81.83	96.72	77.93
1905	MAGILL - HAPPY VALLEY	275	27.83	24.19	27.40	23.82
1906	CHERRY GARDENS - HAPPY VALLEY	275	8.41	5.05	8.82	5.30
1907	CHERRY GARDENS - MORPHETT VALE EAST	275	9.99	7.79	10.09	7.87
1908	HAPPY VALLEY - MORPHETT VALE EAST	275	9.35	7.15	9.58	7.33
1909	Davenport - Olympic West	275	260.66	260.66	259.59	259.59
1910	DAVENPORT - BRINKWORTH ("East Cct")	275	147.37	147.37	148.83	148.83
1911	BRINKWORTH - PARA ("East Cct")	275	137.57	135.70	134.68	132.84
1912	TIPS - MAGILL	275	45.56	33.40	43.05	31.56
1913	PARA - MAGILL No.1	275	22.91	21.51	22.84	21.44
1914	MAGILL - EAST TCE (underground cable)	275	7.90	7.90	7.58	7.58
1915	DAVENPORT - PLAYFORD No. 2	275	4.03	2.96	2.97	2.18
1916	NPS - DAVENPORT No.1	275	2.98	1.49	2.84	1.42
1917	NPS - DAVENPORT No.2	275	2.98	1.49	2.86	1.43
1918	DAVENPORT - PARA ("West Cct")	275	265.55	265.55	265.40	265.40
1919	DAVENPORT - CANOWIE (formerly Davn - Robtwn #1)	275	133.90	66.95	133.88	66.94
1920	DAVENPORT - ROBERTSTOWN No. 2	275	212.50	106.25	212.85	106.42
1921	PARA - TALEM BEND No.1	275	105.43	87.57	100.58	83.54
1922	TALEM BEND - SOUTH EAST No. 1	275	308.23	154.12	296.19	148.10
1923	TALEM BEND - SOUTH EAST No. 2	275	308.23	154.12	296.20	148.10
1924	Pelican Point - Lefevre	275	1.64	0.82	0.91	0.46
1925	Lefevre-TIPS	275	3.66	1.83	0.17	0.08
1926	CANOWIE - ROBERTSTOWN (formerly Davn - Robtwn #1)	275	80.00	40.00	78.99	39.50
1930	SOUTH EAST - HEYWOOD No.1	275	90.96	45.48	12.79	6.39
1931	SOUTH EAST - HEYWOOD No.2	275	90.96	45.48	12.79	6.40
1932	TIPS - KILBURN	275	9.30	4.65	7.51	3.76
1933	KILBURN - NORTHFIELD	275	9.95	4.97	9.58	4.79
1934	TIPS - NORTHFIELD	275	12.25	6.13	9.72	4.86
1935	DAVENPORT - CULTANA No.1	275	61.24	30.62	49.88	24.94
1936	DAVENPORT - CULTANA No.2	275	61.24	30.62	50.45	25.23
1937	DAVENPORT - PLAYFORD No. 1	275	3.60	2.53	3.16	2.22
1938	ROBERTSTOWN - CHERRY GARDENS No.1	275	163.74	81.87	164.38	82.19
1939	ROBERTSTOWN - CHERRY GARDENS No.2	275	163.74	81.87	164.37	82.19
1940	PARAFIELD GARDENS WEST- PARA	275	12.60	6.30	12.70	6.35
Totals			5,844.24	4,852.48	5,427.91	4,553.44



Appendix C SPI PowerNet's easements overlaid on ABARE locations



Appendix D locations

ElectraNet SA's easements overlaid on ABARE



Appendix E ABARE Data

- ABARE maintains a unique suite of comprehensive databases, which contain over 100 000 data time series on domestic and international agriculture, fisheries, forestry, minerals and energy industries and macroeconomic statistics. Data is collected from sample surveys. Included in this data is the value of land and improvements. This is an estimate of the (real) market value of all land operated and fixed improvements as of the end of the financial year. Estimated by the owner-manager or co-operator in the survey. The period covered was 1990 to 2006.

Appendix E ABARE Data

ABARE's sample information

Victoria	Mallee	Wimmera	Central North	Southern and Eastern Victoria	South Australia	North Pastoral	Eyre Peninsula	Murray Lands and Yorke Peninsula	South East		
	YEARS					YEARS					
Population	1990	2142	2654	3857	10941	Population	1990	395	1611	4679	3143
	1991	2017	2697	3817	10866		1991	396	1587	4542	3179
	1992	1863	2591	3587	10104		1992	385	1556	4449	2971
	1993	1880	2471	3352	9874		1993	392	1539	4326	3016
	1994	1813	2440	3176	9505		1994	379	1478	4131	2827
	1995	1774	2336	2931	8984		1995	360	1450	4090	2632
	1996	1863	2580	2808	9097		1996	370	1482	4284	2655
	1997	1762	2612	2946	8565		1997	344	1484	4321	2651
	1998	1782	2695	3057	8392		1998	373	1509	4050	2640
	1999	1703	2561	2975	7818		1999	433	1471	3917	2840
	2000	1905	2586	3175	8781		2000	392	1406	3992	2414
	2001	1687	2463	2859	8774		2001	420	1422	3887	2593
	2002	1657	2294	2829	8444		2002	406	1411	3711	2642
	2003	1571	2277	3153	9305		2003	363	1391	3465	2943
	2004	1585	2192	3099	8792		2004	370	1415	3624	2938
	2005	1612	2228	3157	8881		2005	372	1379	3503	2829
Sample Contributing	1990	23	25	40	67	Sample Contributing	1990	19	19	47	50
	1991	56	60	72	78		1991	36	51	80	75
	1992	52	58	70	75		1992	36	47	69	72
	1993	50	51	61	77		1993	36	47	68	63
	1994	54	45	96	85		1994	33	42	62	85
	1995	44	58	54	91		1995	31	42	63	59
	1996	78	56	56	108		1996	25	32	45	46
	1997	47	46	37	76		1997	24	36	48	55
	1998	39	48	47	94		1998	25	33	57	48
	1999	45	48	48	64		1999	37	39	51	59
	2000	42	50	53	82		2000	19	27	54	54
	2001	43	49	48	77		2001	18	32	54	56
	2002	38	46	45	68		2002	16	25	48	51
	2003	50	56	56	82		2003	15	45	62	48
	2004	38	45	45	93		2004	26	32	54	57
	2005	47	63	60	117		2005	26	40	66	69

Appendix E ABARE data

State	Location	Data item	YEARS							
			1990	1991	1992	1993	1994	1995	1996	
Victoria	Mallee	Value of land and fixed improvements (\$)	\$ 849,153	\$ 581,261	\$ 570,468	\$ 643,394	\$ 641,414	\$ 696,580	\$ 803,892	
		Area operated at 30 June (ha)	1,029	1,136	1,169	1,139	1,180	1,214	1,294	
		\$/ha (real 04/05)	\$ 825	\$ 512	\$ 488	\$ 565	\$ 544	\$ 574	\$ 621	
			\$/ha (Nominal)	\$ 561	\$ 366	\$ 356	\$ 416	\$ 407	\$ 444	\$ 501
	Wimmera	Value of land and fixed improvements (\$)	\$ 792,074	\$ 681,774	\$ 828,144	\$ 727,936	\$ 832,710	\$ 839,054	\$ 871,778	
		Area operated at 30 June (ha)	658	700	752	794	868	857	874	
		\$/ha (real 04/05)	\$ 1,204	\$ 974	\$ 1,101	\$ 917	\$ 959	\$ 979	\$ 997	
			\$/ha (Nominal)	\$ 818	\$ 697	\$ 803	\$ 675	\$ 719	\$ 758	\$ 804
	Central North	Value of land and fixed improvements (\$)	\$ 1,170,259	\$ 812,384	\$ 905,136	\$ 903,736	\$ 800,756	\$ 810,869	\$ 797,092	
		Area operated at 30 June (ha)	600	515	577	616	494	581	536	
		\$/ha (real 04/05)	\$ 1,950	\$ 1,577	\$ 1,569	\$ 1,467	\$ 1,621	\$ 1,396	\$ 1,487	
			\$/ha (Nominal)	\$ 1,326	\$ 1,129	\$ 1,144	\$ 1,080	\$ 1,215	\$ 1,080	\$ 1,199
Southern and Eastern Victoria	Value of land and fixed improvements (\$)	\$ 1,171,369	\$ 950,970	\$ 924,605	\$ 939,703	\$ 1,105,323	\$ 1,065,787	\$ 1,004,111		
	Area operated at 30 June (ha)	364	360	346	376	498	474	416		
	\$/ha (real 04/05)	\$ 3,218	\$ 2,642	\$ 2,672	\$ 2,499	\$ 2,220	\$ 2,248	\$ 2,414		
		\$/ha (Nominal)	\$ 2,188	\$ 1,891	\$ 1,949	\$ 1,840	\$ 1,664	\$ 1,740	\$ 1,947	
SA	North Pastoral	Value of land and fixed improvements (\$)	\$ 1,097,812	\$ 1,120,628	\$ 1,031,893	\$ 1,108,264	\$ 1,243,710	\$ 1,482,465	\$ 1,452,527	
		Area operated at 30 June (ha)	88170	105149	91117	112390	117051	144384	100612	
		\$/ha (real 04/05)	\$ 12	\$ 11	\$ 11	\$ 10	\$ 11	\$ 10	\$ 14	
			\$/ha (Nominal)	\$ 8	\$ 8	\$ 8	\$ 7	\$ 8	\$ 8	\$ 12
	Eyre Peninsula	Value of land and fixed improvements (\$)	\$ 671,957	\$ 572,722	\$ 544,371	\$ 573,025	\$ 665,474	\$ 573,626	\$ 601,548	
		Area operated at 30 June (ha)	1675	2086	1949	1908	2422	2367	2234	
		\$/ha (real 04/05)	\$ 401	\$ 275	\$ 279	\$ 300	\$ 275	\$ 242	\$ 269	
			\$/ha (Nominal)	\$ 273	\$ 197	\$ 204	\$ 221	\$ 206	\$ 188	\$ 217
	Murray Lands and Yorke Peninsula	Value of land and fixed improvements (\$)	\$ 1,073,394	\$ 839,733	\$ 891,644	\$ 975,934	\$ 1,077,656	\$ 996,143	\$ 1,043,081	
		Area operated at 30 June (ha)	1003	1028	1130	892	1031	1115	1165	
		\$/ha (real 04/05)	\$ 1,070	\$ 817	\$ 789	\$ 1,094	\$ 1,045	\$ 893	\$ 895	
			\$/ha (Nominal)	\$ 728	\$ 585	\$ 576	\$ 806	\$ 784	\$ 691	\$ 722
South East	Value of land and fixed improvements (\$)	\$ 1,244,748	\$ 1,107,650	\$ 1,209,602	\$ 1,192,007	\$ 1,287,417	\$ 1,083,030	\$ 1,021,364		
	Area operated at 30 June (ha)	705	803	725	803	769	855	740		
	\$/ha (real 04/05)	\$ 1,766	\$ 1,379	\$ 1,668	\$ 1,484	\$ 1,674	\$ 1,267	\$ 1,380		
		\$/ha (Nominal)	\$ 1,200	\$ 987	\$ 1,217	\$ 1,093	\$ 1,255	\$ 980	\$ 1,113	
Proportion of SA value to Southern and Eastern Victoria										
SA: North Pastoral			0.4%	0.4%	0.4%	0.4%	0.5%	0.5%	0.6%	
SA: Eyre Peninsula			12.5%	10.4%	10.5%	12.0%	12.4%	10.8%	11.2%	
SA: Murray Lands and Yorke Peninsula			33.3%	30.9%	29.5%	43.8%	47.1%	39.7%	37.1%	
SA: South East			54.9%	52.2%	62.4%	59.4%	75.4%	56.3%	57.2%	

Appendix F Australian Bureau of Statistics data

	Jun.1984	Jun.1985	Jun.1986	Jun.1987	Jun.1988	Jun.1989	Jun.1990	Jun.1991	Jun.1992	Jun.1993	Jun.1994	Jun.1995	Jun.1996	Jun.1997	Jun.1998	Jun.1999	Jun.2000	Jun.2001	Jun.2002	Jun.2003	Jun.2004	Jun.2005	Jun.2006	
Table 83. VALUE OF LAND, Land use by state - as at 30 June																								
RESIDENTIAL																								
Victoria						111.2	112.2	106.8	94.2	108.9	114.2	120.9	127.5	162.6	191	212.8	251.4	277.5	357.1	408.8	515.6	495	524.3	
South Australia						21.3	26.3	26.6	29.5	30.4	31.4	34.3	33.1	34.2	37.8	41.1	46.4	48.3	60.2	72.3	90.2	102.2	117.9	
Australia						417.3	442.3	455.8	476.1	485.2	529.2	576.3	586	668	784.5	856.4	966.8	1022.5	1294.1	1522.3	1814.1	1872.8	2046.5	
COMMERCIAL																								
Victoria	11.0	13.8	16.1	17.4	29.9	32.7	27.3	26.5	21.2	18.8	19.6	20.5	21.1	22.2	23.4	24.5	25.7	28.3	35.3	42.9	50.6	56.8	61.3	
South Australia	2.4	2.8	3.4	3.4	3.9	5.1	5.8	5.8	5.0	4.2	3.9	4.0	4.8	5.0	5.0	5.1	5.3	5.6	6.4	6.9	9.7	11.3	12.7	
Australia	13.4	16.6	19.5	20.8	33.8	111.5	101.9	90.6	78.5	76.2	78.8	81.4	82.7	88.7	93.4	98.9	104.3	110.2	126.9	156.7	178.4	203.5	215.6	
RURAL																								
Victoria	9.7	11.0	12.3	13.7	15.0	15.5	16.1	16.6	15.0	17.4	17.5	17.6	17.6	18.8	20.5	21.9	23.6	25.7	28.5	34.6	41.3	47.9	52.8	
South Australia	5.4	5.8	6.2	6.6	7.0	6.9	6.9	6.8	5.1	4.4	4.4	4.6	7.8	8.1	8.7	9.5	10.0	10.3	11.7	12.9	16.0	19.8	22.0	
Australia	15.1	16.8	18.5	20.3	22.0	62.3	64.6	66.7	56.6	59.8	58.6	61.3	81.1	84.8	92.6	97.5	103.4	113.7	129.6	142.7	177.6	208.2	230.3	
OTHER																								
Victoria						10.7	10.1	9.9	8.7	8.5	8.6	8.7	8.9	10	10.7	11.2	14.5	15.3	18.2	20.1	24.2	30.6	32.3	
South Australia						1.4	1.3	1.3	1.1	1.1	1.1	1.1	1.2	1.3	1.4	1.5	3	3	3.3	3.6	4	4.4	4.6	
Australia						65.7	62.2	60.7	53.3	52.4	53	53.4	54.8	61.3	66	69	76.9	78.1	89.2	98.7	113.9	133.2	140.9	
TOTAL																								
Victoria						170.1	165.7	159.8	139.1	153.6	159.9	167.6	175.1	213.6	245.6	270.4	315.2	346.8	439.1	506.4	631.7	630.3	670.7	
South Australia						34.7	40.3	40.5	40.7	40.1	40.8	44	46.9	48.6	52.9	57.2	64.7	67.2	81.6	95.7	119.9	137.7	157.2	
Australia						656.8	671	673.8	664.5	673.6	719.6	772.4	804.6	902.8	1036.5	1121.8	1251.4	1324.5	1639.8	1920.4	2284	2417.7	2633.3	

Appendix G CPI adjustment factors

Table 28.5 RETAIL/CONSUMER PRICE INDEX NUMBERS(a)(b)

2007 Year Book Australia Number 89 ABS Catalogue No. 1301.0

(a) Reference base year is 1945 = 100.0. (b) The index numbers from 1901 to 1980 relate to the weighted average of six state capital cities; and from

Source: ABS data available on request, Consumer Price Index.

1901	47.00
1902	50.00
1903	49.00
1904	46.00
1905	48.00
1906	48.00
1907	48.00
1908	51.00
1909	51.00
1910	52.00
1911	53.00
1912	59.00
1913	59.00
1914	61.00
1915	70.00
1916	71.00
1917	75.00
1918	80.00
1919	91.00
1920	103.00

1921	90.00
1922	87.00
1923	89.00
1924	88.00
1925	88.00
1926	90.00
1927	89.00
1928	89.00
1929	91.00
1930	87.00
1931	78.00
1932	74.00
1933	71.00
1934	73.00
1935	74.00
1936	75.00
1937	78.00
1938	80.00
1939	82.00
1940	85.00
1941	89.00
1942	97.00
1943	101.00
1944	100.00
1945	100.00
1946	102.00
1947	106.00
1948	117.00
1949	128.00

1950	140.00
1951	167.00
1952	196.00
1953	205.00
1954	206.00
1955	211.00
1956	224.00
1957	229.00
1958	233.00
1959	237.00
1960	245.00
1961	252.00
1962	251.00
1963	252.00
1964	258.00
1965	268.00
1966	276.00
1967	286.00
1968	293.00
1969	302.00
1970	313.00
1971	332.00
1972	352.00
1973	385.00
1974	443.00
1975	510.00
1976	579.00
1977	650.00
1978	702.00

1979	766.00
1980	844.00
1981	926.00
1982	1028.00
1983	1132.00
1984	1177.00
1985	1257.00
1986	1370.00
1987	1487.00
1988	1594.00
1989	1714.00
1990	1839.00
1991	1898.00
1992	1917.00
1993	1952.00
1994	1989.00
1995	2082.00
1996	2136.00
1997	2141.00
1998	2159.00
1999	2191.00
2000	2289.00
2001	2389.00
2002	2462.00
2003	2530.00
2004	2588.00
2005	2658.00

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