K Year specific data, for year ending 31 March 2005

Note that the figures in this appendix are estimates used for the purposes of calculating charges for pricing years, which are years ending 31 March. They will therefore differ from actual figures for years ending 30 June as published later in, for example, Transpower's annual report.

For example, the anytime maximum demand and anytime maximum injection measures used to determine the interconnection and HVDC rates are based on the capacity measurement period. These measures will inevitably differ from the updated measures used to determine customers' interconnection and HVDC charges, resulting in some over or under recovery against the revenue requirement. Also, the historical maintenance and overheads costs used for setting rates will inevitably differ from the actual costs that eventuate for the pricing year.

Over time, charges are reconciled with actual revenue and costs through the economic value adjustments, as described in section 3.7 and enumerated in table K9.

All dollar amounts specified in this appendix are exclusive of GST.

Table K1 – Period covered

Pricing year	1 April 2004 to 31 March 2005
Capacity measurement period	1 September 2002 to 31 August 2003

Table K2 – Revenue requirement

Million dollars		**HVAC**	**HVDC**
Revenue requirement		**$M 417.4**	**$M 66.0**
Of which:	Operating	$M 7.6	$M 0.7
	Maintenance (including Non routine maintenance)	$M 57.8	$M 7.5
	Overheads (A&G, transfer of ancillary service costs)	$M 98.9	$M 10.2
	Capital related costs	$M 253.1	$M 47.6
of which:	Post-tax capital charge	$M 113.8	$M 22.7
	Tax charge (including interest tax shield)	$M 49.9	$M 3.6
	Depreciation and write-offs	$M 89.4	$M 21.3

The post-tax capital charge is the average of opening and closing operating capital times post-tax nominal WACC, where operating capital includes fixed assets (but not works under construction) and working capital (but not provision for dividends, provision for deferred tax, accrued interest or short-term investments).

Table K3 –Capital rates

WACC	**Transpower's weighted average cost of capital (post tax nominal)**	7.0%
calculated as:	Risk free rate (R_f)	6.7%
	Corporate tax rate (T_C)	33%
	Asset beta (B_a)	0.25
	Equity % (E)	46.9%
	Equity beta (B_e)	0.53
	Post tax market risk premium (PTMRP)	7.5%
	Interest tax parameter (T_i)	19.8%
	Dividend tax parameter (T_j)	-3.1%
	Dividend yield (D_j)	4.2%
	Cost of equity (R_e)	9.2%
	Debt margin (dm)	1.0%
	Cost of debt (R_d)	7.6%

See appendix A for a description of the application of capital rates.

Table K4 – Asset costs and rates

WACC	Transpower's weighted average cost of capital (pre-tax nominal)	10.45%
ODRC	Optimised depreciated replacement cost of HVAC assets (excluding new investment agreements)	$M 1485.9
D	Total depreciation on HVAC assets	$M 89.4
ORC	Optimised replacement cost of the HVAC assets	$M 3225.0
ARR_{HVAC}	Asset return rate	7.59%

See appendix A for a description of the application of asset costs and rates. For further details on the asset values are documented in the Transpower's 2002 Report of the Optimised Deprival Valuation of Transpower's Fixed Assets.

Table K5 – Maintenance and overhead rates

MRR	Maintenance recovery rate	
	Substations	1.16%
	220 kV tower lines	$ 1,087 / km
	Other tower lines	$ 1,635 / km
	Pole lines	$ 1,754 / km
IOR	Injection overhead rate	3.3%

Table K6 – Capacity measurements

P	Number of offtake peaks averaged in calculating anytime maximum demand	12
S **AMD**	Sum of the anytime maximum demands for the capacity measurement period for all customers (used for calculating the interconnection rate)	6,231,736 kW
S **AMI**	Sum of the anytime maximum injections for the capacity measurement period for all customers who inject electricity into the grid system in the South Island (used for calculating the HVDC rate)	3,324,194 kW

Table K7 – Customer allocations according to methodology

Million dollars, prior to EV adjustment	HVAC		HVDC
	Connection	**Interconnection**	
Rate	Not applicable	$50.62/kW	$19.85/kW
Allocation to customers (total)	**$M 101.9**	**$M 315.5***	**$M 66.0***
Capital component	$M 80.5	$M 172.6	$M 47.6
Maintenance component	$M 13.6	$M 44.2	$M 7.5
Operating component	$M 4.4	$M 3.2	$M 0.7
Overhead component	$M 3.5	$M 95.4	$M 10.2

** estimate based on rate assuming aggregate anytime maximum demands and anytime maximum injections as in table K6.*

Component figures are rounded and may not sum to total.

Most customers are on the pricing methodology as described in this booklet. Some customers however have output or input connection contracts for connection to grid assets that extend beyond 31 March 2004. Transpower is bound by those contracts, so those customers' charges are calculated according to the methodology of those contracts, the "1996 methodology", for which the third edition of the pricing booklet remains applicable[1].

Table K8 shows the aggregate allocation to customers taking into account those contracts and the resultant charges. Customers contracted on the 1996 methodology are charged for connection, access and transport, and HVDC. The 1996 connection definition differs from that of the methodology as described in this booklet, and the access and transport charges have been replaced. It is not possible, therefore, to break down the customer allocations allowing for contracts meaningfully and consistently into capital, maintenance, operating and overhead components.

1 Transpower Booklet Pricing of Transmission Services, Pricing Methodology from 1 April 1998, Third Edition, April 1998.

Table K8 – Customer allocations allowing for contracts

Million dollars, prior to EV adjustment	HVAC		HVDC
	Connection	**Interconnection/ Access/Transport**	
Allocation to customers (total)	$M 99.2	$M 315.5	$M 66.0

The offtake and injection used for the interconnection and HVDC charges relates to the capacity measurement period.

Table K9 – Economic Value loss/gain adjustment

Million dollars	**HVAC**	**HVDC**
Adjustment to revenue requirement	$ 0	$ 0
Ratio of adjustment to revenue requirement	0 %	0 %