

GOLDFIELDS GAS PIPELINE REFERENCE TARIFF MODEL FOR 2010 -2014 AA PERIOD PUBLIC VERSION FOR USE		2010	2011	2012	2013	2014
		4	4	4	4	4
		365	365	366	365	365

General

A series of assumptions have been made about business relationships in the preparation of this model.
In developing the input data for rolling forward the opening capital base, actual opex and capex expenditures have been used for the period from 2005 to 2008;

Model

This model determines the Roll forward capital base, total revenue and reference tariff for the Goldfields Gas Pipeline.

Inputs

All model inputs are shown in blue colour fonts as shown here 123
All monetary inputs are expressed in \$m rounded to 3 decimal places
All monetary inputs for Opex and Capex are in nominal \$ of the day; IAB and depreciations are in historical dollar i.e. \$2000 as per the previous AA
Pipe capacity forecasts are shown in TJ/d rounded to 2 decimal places
Pipe throughput forecasts are expressed in TJ/d rounded to 2 decimal places

Model outputs		2010	2011	2012	2013	2014
Opening capital base (1 January 2010) \$2000	\$m	442.32				
Nominal-pre tax WACC		14.34%				
Inflation forecasts		2.40%				
Reference service capacity	TJ/d	3.81	3.81	3.81	3.81	3.81
Annual Reference tariff 2010 to 2014						
Toll charge	\$/GJ	0.345720	0.354017	0.362514	0.371214	0.380123
Reservation charge	\$/GJ km	0.002126	0.002177	0.002229	0.002283	0.002338
Throughput charge	\$/GJ km	0.000572	0.000585	0.000599	0.000614	0.000628
Revenue from reference tariff	\$m	4.255	4.357	4.474	4.568	4.678

GOLDFIELDS GAS PIPELINE		2010	2011	2012	2013	2014
Reference Tariff setting		4	4	4	4	4
PUBLIC - TARIFF FOR USE		365	365	366	365	365

Inflation						
Forecast index						
Annual CPI		2.40%	2.40%	2.40%	2.40%	2.40%
Tariff escalation		2.40%	2.40%	2.40%	2.40%	2.40%

Cost of Service Revenue for Reference Service						
Return	\$m	2.133	2.133	2.120	2.078	2.033
Depreciation	\$m	0.361	0.379	0.399	0.408	0.412
Over Depreciation AA1	\$m	-0.014				
Non capital costs	\$m	2.088	1.361	1.398	2.202	3.009
Allowable Reference Service revenue	\$m	15.112	4.568	3.873	4.689	5.454
Capital Allocation [% total]						
Smoothed	11.45%	0.00%	3.36%	3.36%	3.36%	3.36%
PJ km/d basis	11.45%	3.37%	3.36%	3.37%	3.35%	3.35%

Allocation of Cost of Service to reference tariff						
Toll charge		11.30%	11.30%	11.30%	11.30%	11.30%
Reservation charge		72.20%	72.20%	72.20%	72.20%	72.20%
Throughput charge		16.50%	16.50%	16.50%	16.50%	16.50%

Reference tariff setting 2010 - 2014						
Toll charge	\$/GJ	0.345720	0.354017	0.362514	0.371214	0.380123
Reservation charge	\$/GJ km	0.002126	0.002177	0.002229	0.002283	0.002338
Throughput charge	\$/GJ km	0.000572	0.000585	0.000599	0.000614	0.000628
PV (Cost of Service for Reference Service) 2010-2014	\$m	15.11	OK			
Allocation of PV(cost) to toll charge	\$m	1.70762	Press Button to solve for allocated Reference tariff on annual basis			
PV(revenue from toll charge)	\$m	1.70762				
Difference	\$m	0.00000				
Allocation of PV(cost) to reservation charge	\$m	10.91064				
PV(revenue from reservation charge)	\$m	10.91064				
Difference	\$m	0.00000				
Allocation of PV(cost) to throughput charge	\$m	2.49343				
PV(revenue from throughput charge)	\$m	2.49343				
Difference	\$m	0.00000				

Revenue from toll charge						
REFERENCE SERVICE	\$m	0.481	0.492	0.506	0.516	0.529

Revenue from reservation charge						
REFERENCE SERVICE	\$m	3.072	3.146	3.230	3.298	3.378

Revenue from throughput charge						
REFERENCE SERVICE	\$m	0.702	0.719	0.738	0.754	0.772

Revenue from reference service						
	\$m	4.255	4.357	4.474	4.568	4.678

GOLDFIELDS GAS PIPELINE		2010	2011	2012	2013	2014
Cost of Service Revenue		4	4	4	4	4
PUBLIC VERSION FOR USE		365	365	366	365	365

Non capital costs						
Non capital costs	\$m	30.655	27.037	27.997	29.878	31.831

Rate of return						
Nominal risk free rate		5.37%	5.37%	5.37%	5.37%	5.37%
Real risk free rate		2.90%	2.90%	2.90%	2.90%	2.90%
Expected inflation		2.40%	2.40%	2.40%	2.40%	2.40%
Pre-tax nominal WACC		14.34%	14.34%	14.34%	14.34%	14.34%

Inflation									
CPI (Sept qtr)		158.6	166.5	169.0	173.0	177.2	181.4	185.8	190.3
Estimated CPI (check)					2.40%	2.40%	2.40%	2.40%	2.40%
Forecast index									
Annual change (actual)					2.40%	2.40%	2.40%	2.40%	2.40%
Tariff escalation					2.40%	2.40%	2.40%	2.40%	2.40%

Cost of service revenue forecasts						
Opening asset base		442.32	442.30	439.74	430.98	421.63
Return	\$m	63.442	63.439	63.071	61.815	60.474
Depreciation	\$m	10.748	11.285	11.883	12.150	12.253
Over Depreciation AA1	\$m	10.60%	-0.428			
Non capital costs	\$m	30.655	27.037	27.997	29.878	31.831
Total Cost of Service revenue	\$m	104.417	101.762	102.951	103.844	104.557

PV(cost of service)	2010-2014	\$m	352.26
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Goldfields Gas Pipeline		2010	2011	2012	2013	2014
CAPEX and OPEX allocation to Reference Service		4	4	4	4	4
PUBLIC VERSION FOR USE		365	365	366	365	365

REFERENCE SERVICE						
Reference Service capacity	TJ/d	3.81	3.81	3.81	3.81	3.81
Wt. avg. distance	km	1,039.0	1,039.0	1,039.0	1,039.0	1,039.0
Total covered capacity	TJ/d	109.9	108.6	108.5	108.9	109.0
Wt. avg. distance	km	1,069.0	1,083.5	1,083.0	1,084.0	1,084.1

OPEX FORECASTS						
	\$m	30.655	27.037	27.997	29.878	31.831

OPEX for Reference Service						
	\$m	2.088	1.361	1.398	2.202	3.009

GOLDFIELDS GAS PIPELINE		2010	2011	2012	2013	2014
Capacity and Throughput		4	4	4	4	4
PUBLIC VERSION FOR USE		365	365	366	365	365

Reserved capacity

REFERENCE SERVICE	TJ/d	3.81	3.81	3.81	3.81	3.81
TOTAL capacity	TJ/d	109.94	108.62	108.54	108.92	108.96

Load factor

REFERENCE SERVICE		85%	85%	85%	85%	85%
TOTAL pipeline		82%	82%	82%	82%	82%

Throughput

REFERENCE SERVICE	TJ/d	3.24	3.24	3.24	3.24	3.24
TOTAL throughput	TJ/d	90.67	89.48	89.39	89.71	89.73

Distance from receipt point

REFERENCE SERVICE	km	1,039.00	1,039.00	1,039.00	1,039.00	1,039.00
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Capacity (PJ km/d)

REFERENCE SERVICE	PJ km/d	3.96	3.96	3.96	3.96	3.96
Total PJkm/d		117.5	117.7	117.6	118.1	118.1

Throughput (PJ km/d)

REFERENCE SERVICE	PJ km/d	3.36	3.36	3.36	3.36	3.36
Total PJkm/d		96.5	96.5	96.4	96.8	96.8

Wt. Average distance	1,080.72	1,068.96	1,083.48	1,083.01	1,084.01	1,084.13
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Goldfields Gas Pipeline	2000	2000	2000	2000	2001	2001	2001	2001	2002	2002	2002	2002	2003	2003	2003	2003
Asset Base_2000-2009	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
PUBLIC VERSION FOR USE	91	91	92	92	90	91	92	92	90	91	92	92	90	91	92	92

Capital base roll forward																	
Capital base (beginning of year)	\$m	513.651	512.354	510.681	508.978	507.286	507.545	506.982	506.402	505.831	502.796	500.363	497.928	495.508	496.799	496.572	496.324
CAPEX [Actual]		0.911	0.911	0.911	0.911	2.098	2.098	2.098	2.098	0.280	0.280	0.280	0.280	2.535	2.535	2.535	2.535
Depreciation	\$m	2.574	2.584	2.594	2.604	2.614	2.632	2.651	2.669	2.687	2.691	2.695	2.699	2.703	2.725	2.747	2.769
Change in linepack	\$m	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Change in working capital	\$m	0.367	0.000	-0.020	0.000	0.775	-0.028	-0.028	0.000	-0.627	-0.021	-0.020	0.000	1.459	-0.036	-0.036	0.000
Capital base (end of year)	\$m	512.354	510.681	508.978	507.286	507.545	506.982	506.402	505.831	502.796	500.363	497.928	495.508	496.799	496.572	496.324	496.090

Goldfields Gas Pipeline	2004	2004	2004	2004	2005	2005	2005	2005	2006	2006	2006	2006
Asset Base_2000-2009	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
PUBLIC VERSION FOR USE	91	91	92	92	90	91	92	92	90	91	92	92

Capital base roll forward													
Capital base (beginning of year)	\$m	496.090	494.125	492.848	491.548	490.255	488.105	485.750	482.796	480.069	477.422	475.542	473.255
CAPEX [Actual]		1.535	1.535	1.535	1.535	0.644	0.567	0.144	0.145	0.254	0.780	0.694	0.405
Depreciation	\$m	2.791	2.812	2.808	2.828	2.848	2.856	2.864	2.872	2.880	2.896	2.912	2.928
Change in linepack	\$m	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Change in working capital	\$m	-0.708	0.000	-0.028	0.000	0.055	-0.066	-0.234	0.001	-0.022	0.236	-0.069	-0.141
Capital base (end of year)	\$m	494.125	492.848	491.548	490.255	488.105	485.750	482.796	480.069	477.422	475.542	473.255	470.591

Goldfields Gas Pipeline		2007	2007	2007	2007	2008	2008	2008	2008	2009	2009	2009	2009
Asset Base_2000-2009		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
PUBLIC VERSION FOR USE		90	91	92	92	91	91	92	92	90	91	92	92

Capital base roll forward													
Capital base (beginning of year)	\$m	470.591	468.414	466.314	463.346	460.340	457.641	455.430	452.732	450.474	448.728	447.175	444.134
CAPEX [Actual]		0.624	0.799	0.287	0.086	0.046	0.557	0.425	0.664	0.929	1.338	0.272	0.732
Depreciation		2.943	2.960	2.977	2.993	3.010	3.020	3.030	3.040	3.050	3.061	2.757	2.768
Change in linepack	\$m	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Change in working capital	\$m	0.143	0.061	-0.277	-0.099	0.264	0.252	-0.093	0.117	0.376	0.169	-0.556	0.225
Capital base (end of year)	\$m	468.414	466.314	463.346	460.340	457.641	455.430	452.732	450.474	448.728	447.175	444.134	442.323

Goldfields Gas Pipeline		2010	2011	2012	2013	2014
Asset Base_2010-2014		4	4	4	4	4
PUBLIC VERSION FOR USE		365	365	366	365	365

Capital base roll forward						
Capital base (beginning of year)	\$m	442.32	442.305	439.741	430.983	421.629
CAPEX		8.721	9.119	3.686	2.678	2.163
Depreciation	\$m	10.748	11.285	11.883	12.150	12.253
Change in linepack	\$m	0.000	0.000	0.000	0.000	0.000
Change in working capital	\$m	2.009	-0.397	-0.562	0.118	0.177
Capital base (end of year)	\$m	442.305	439.741	430.983	421.629	411.716