

APA  
Group



# GasNet Australia Access Arrangement Information

Commencement Date: 1 January 2008

# GasNet Australia Access Arrangement Information Contents

<b>1</b>	<b>Introduction</b>	<b>2</b>
1.1	Purpose	2
1.2	Relationship with Access Arrangement Submission	2
1.3	Description of PTS	2
<b>2</b>	<b>Capital Base</b>	<b>3</b>
2.1	Rolled Forward Capital Base	3
2.2	Accumulated Depreciation	3
2.3	Summary of Capital Base	4
<b>3</b>	<b>Revenue Requirement</b>	<b>4</b>
3.1	Total Revenue	4
3.2	Rate of return	4
3.3	Depreciation Allowance	5
3.4	Inflation	7
3.5	Non-Capital Costs	7
3.6	Forecast Capital Expenditure	10
3.7	Summary of components of revenue requirement	11
<b>4</b>	<b>Volume Forecasts</b>	<b>12</b>
4.1	Peak demand 2003-2007	12
4.2	Peak demand 2008-2012	12
4.3	System load profile	13
4.4	Annual volume across each pricing zone	13
<b>5</b>	<b>Reference Tariff Calculation</b>	<b>13</b>
<b>6</b>	<b>Key Performance Indicators</b>	<b>13</b>
<b>7</b>	<b>Price Control</b>	<b>13</b>
7.1	Temperature Sensitivity	13
7.2	Effective Degree Days	14
<b>8</b>	<b>Interpretation</b>	<b>14</b>
8.1	Reference to Access Arrangement	14
8.2	Glossary	14
<b>Schedule 1 - Description of PTS</b>		<b>16</b>
<b>Schedule 2 - System load profile and Annual volume</b>		<b>20</b>

# GasNet Australia Access Arrangement Information Details

<b>Covered Pipeline</b>	Principal Transmission System ("PTS")	
<b>Lodged by</b>	GasNet Australia (Operations) Pty Ltd ABN 65 083 009 278 ("GasNet")	
<b>Contact</b>	Address	180 Greens Road Dandenong, VIC 3175
	Website	<a href="http://www.gasnet.com.au">www.gasnet.com.au</a>
	Telephone	03 9797 5222
	Fax	03 9797 5189
	Attention	Company Secretary
<b>Commencement Date</b>	1 January 2008	
<b>End Date</b>	31 December 2012	

# GasNet Australia Access Arrangement Information

---

## **1 Introduction**

### **1.1 Purpose**

This AA Information is submitted to the Regulator in accordance with section 2.28 of the Code.

GasNet has lodged with the Regulator the GasNet Access Arrangement in relation to the PTS to apply in the Third Access Arrangement Period commencing on 1 January 2008.

The purpose of this AA Information is to assist Users and Prospective Users to understand the derivation of the elements of GasNet's Access Arrangement.

This AA Information addresses the categories of information in Attachment A of the Code, except information in relation to the total number of customers in each pricing zone, service or category of asset.

### **1.2 Relationship with Access Arrangement Submission**

To reduce the repetition of information between the Submission and this AA Information, GasNet has included minimal discussion of Code principles in this AA Information. As a result, this AA Information is limited to relevant statistical data supporting GasNet's Access Arrangement for the Third Access Arrangement Period.

### **1.3 Description of PTS**

A description of the PTS is contained in section 3.2 of the Submission. In addition, a map of the PTS together with a description of the PTS pipelines is contained in Schedule 1 to this AA Information.

## 2 Capital Base

### 2.1 Rolled Forward Capital Base

Table 2.1 sets out how the Capital Base was adjusted over the Second Access Arrangement Period.

**Table 2-1: Rolled Forward Capital Base (Nominal \$ million)**

Year ending 31 December	2003	2004	2005	2006	2007
Opening Capital Base	496.18	487.97	479.47	473.65	476.10
Inflation on Opening Capital Base	11.90	12.42	13.42	15.40	16.28
Depreciation allowance <sup>(1)</sup>	-20.61	-21.60	-22.81	-23.92	-24.41
Capital expenditure <sup>(1)(2)</sup>	0.50	0.70	3.57	10.97	92.54
Disposals/Redundancies <sup>(1)</sup>	0.00	-0.02	0.00	0.00	0.00
<b>Closing Capital Base</b>	<b>487.97</b>	<b>479.47</b>	<b>473.65</b>	<b>476.10</b>	<b>560.51</b>
Adjustment for 2002 capex overestimate					-0.11
Adjustment for 2002 inflation underestimate					0.34
<b>Adjusted Closing Capital Base</b>					<b>560.74</b>

<sup>(1)</sup> Depreciation allowance, Capital expenditure and Disposals are in end of year dollars.

<sup>(2)</sup> Includes interest during construction

Note: Opening Capital Base for 2003 is different from Forecast Opening Capital Base from last AAI due to actual CPI and capex for 2002.

### 2.2 Accumulated Depreciation

Accumulated depreciation of the Capital Base to 31 December 2007 is shown in Table 2-2 below.

**Table 2-2: Accumulated Depreciation (Nominal \$ million)**

Accumulated depreciation as at 1 January 2003	306.7
Plus depreciation for period 1 January 2003 to 31 December 2007	113.4

Accumulated Depreciation as at 31 December 2007
---

420.1
-------

### 2.3 Summary of Capital Base

Table 2-3 describes the Capital Base (by category of asset) at the commencement of the Second Access Arrangement Period. These figures are in nominal dollars assuming actual CPI from 1 January 2003 and 3.09% CPI forecast from 31 December 2006.

**Table 2-3: Capital Base as at 1 January 2008 (Nominal \$ million)**

Facility Category	
Pipelines	447.06
Compressors	75.39
City Gates & Field Regulators	25.26
Odourant Plants	0.19
Gas Quality	0.40
Other	2.79
General Land & Building	9.66
<b>Total</b>	<b>560.74</b>

---

## 3 Revenue Requirement

### 3.1 Total Revenue

GasNet has used the Building Block methodology for determining its Total Revenue requirement as set out in section 8 of the Submission.

### 3.2 Rate of return

GasNet's proposals for the various parameters of the cost of capital are provided in Table 3-1. These are discussed in further detail in section 6.4 of the Submission.

**Table 3-1: WACC Parameters**

WACC Parameter	
Real risk-free interest rate	3.52%
Nominal risk-free interest rate	6.29%
Bond Maturity Period	10 years
Bond type	Commonwealth Bonds
Bond calculation and debt margin period	40 days ending on 31st March 2008
Forecast Inflation	2.68%
Inflation selection period	10 years (consistent with bond maturity period)
Debt margin	2.99%
Credit rating	BBB+
Debt raising costs	0.104%
Cost of Debt	9.38%
Market risk premium	6.0%
Gearing Ratio (debt : equity)	60:40
Value of Imputation Credits (gamma)	50%
Equity beta	1
Return to Equity	12.29%
Nominal Vanilla WACC	10.55%
Real Vanilla WACC	7.67%

### 3.3 Depreciation Allowance

#### 3.3.1 *Asset Categories and Technical Life*

Table 3-2 shows the defined asset groups and technical lives adopted for each group. GasNet proposes to retain the same technical and economic lives approved at the commencement of the Second Access Arrangement Period, with only minor modifications, as discussed in sections 8.2 and 8.3 of the Submission.

**Table 3-2: Assets categories**

<b>Asset category</b>	<b>Technical life</b>
Compressor stations	30 years
Heaters	20 years
Regulators	30 years
Pipelines	60 years
Telemetry equipment	10 years
Buildings	60 years
Land	N/A
Office equipment	5 years

### **3.3.2 Economic Life**

The proposed economic lives of the Pipeline asset groups is shown in Table 3-3. GasNet proposes to retain the approach used in the Second Access Arrangement Period for the Third Access Arrangement Period except for the Murray Valley Pipeline where the economic life has been extended from 2033 to 2054.

**Table 3-3 Remaining Economic Life by Pipeline Group**

<b>Pipeline Group</b>	<b>End of Life</b>
Longford	2023
SWP	2052
Rest of Existing System	2033
Murray Valley Pipeline	2054
New Pipelines	55 years after commissioning

### **3.3.3 Depreciation Schedule**

Table 3-4 below shows the calculated depreciation allowance for each class of asset and the total depreciation allowance that has been included in the Total Revenue. As discussed in section 8.2 of the Submission, these are based on the existing CCA framework utilising a real Rate of Return to calculate revenue.



**Table 3-4: Depreciation Allowance by Asset Category (Nominal \$ million)**

Year ending 31 December	2008	2009	2010	2011	2012
Pipelines	19.38	20.57	21.38	21.98	22.59
Compressors	4.94	7.14	8.95	9.40	9.94
City Gates & Field Regulators	1.24	1.54	1.61	1.65	1.66
Odourant Plants	0.01	0.01	0.01	0.02	0.02
Gas Quality	0.10	0.11	0.11	0.12	0.14
Other	0.78	0.85	0.89	0.56	0.54
General Building	0.26	0.32	0.32	0.35	0.38
<b>Total</b>	<b>26.72</b>	<b>30.53</b>	<b>33.27</b>	<b>34.07</b>	<b>35.26</b>

### 3.4 Inflation

Consistent with section 8.5A of the Code, the Reference Tariffs have been calculated so as to deal with the effects of inflation as discussed in section 8.2 of the Submission. As GasNet has adopted a real Rate of Return methodology, the Reference Tariffs incorporate an escalation of the Capital Base each year, taking into account depreciation in the preceding year.

### 3.5 Non-Capital Costs

#### 3.5.1 Code requirements

The Code (sections 8.36 and 8.37) allows the recovery of all operating, maintenance and other non capital costs that would be incurred by a prudent Service Provider, acting efficiently and in accordance with good industry practice, in providing the Reference Service.

#### 3.5.2 Operating costs

All of GasNet's operating costs except for compressor fuel, odorant and electricity used at compressor station operations are fixed in nature. GasNet's forecast operating costs for the period 2008 to 2012 are shown in Table 3-5 below.

**Table 3-5: Total Forecast Non Capital Costs 2008-2012 (\$m 2006 (July))**

	2008	2009	2010	2011	2012
<b>\$2006 (Jul) Base Forecast</b>	20.93	20.93	20.93	20.93	20.93
<b>Scope Changes</b>	0.87	1.00	1.00	1.00	1.01

<b>Workload Changes (excluding fuel gas)</b>	0.50	1.07	1.13	1.18	1.23
<b>Incremental Labour</b>	0.62	0.94	1.26	1.60	1.95
<b>SUB-TOTAL</b>	<b>24.45</b>	<b>25.37</b>	<b>25.82</b>	<b>26.27</b>	<b>26.81</b>
<b>Benefit Sharing Allowance</b>	0.90	-0.69	-1.59	-0.85	0.00
<b>Reset Costs</b>	0.95				
<b>K factor carry over<sup>(a)</sup></b>	0.71				
<b>Asymmetric Risk<sup>(a)</sup></b>	0.18	0.18	0.18	0.18	0.18
<b>Equity Raising Costs<sup>(a)</sup></b>	0.48	0.48	0.48	0.48	0.48
<b>Other Allowances<sup>(b)</sup></b>	0.22	0.23	0.23	0.23	0.23
<b>Sub-total</b>	<b>3.44</b>	<b>0.20</b>	<b>-0.70</b>	<b>0.04</b>	<b>0.89</b>
<b>TOTAL NON CAPITAL COSTS</b>	<b>27.89</b>	<b>25.57</b>	<b>25.12</b>	<b>26.31</b>	<b>27.70</b>

<sup>(a)</sup> Restated from December 2007 dollars.

<sup>(b)</sup> Return on linepack and inventories.

These operating costs comprise a range of cost components, allocated as shown in Table 3-6 below.

**Table 3-6: Components of Forecast Operating Costs 2008-2012  
(\$ 2006 million)**

Cost Category	2008	2009	2010	2011	2012
Labour	12.29	12.92	13.20	13.41	13.58
Materials	1.02	1.08	1.08	1.09	1.12
Outside Services	3.25	3.45	3.48	3.53	3.61
Fuel Gas	2.77	2.75	2.89	3.03	3.19
Other	5.12	5.17	5.17	5.21	5.31
<b>Total</b>	<b>24.45</b>	<b>25.37</b>	<b>25.82</b>	<b>26.27</b>	<b>26.81</b>

### 3.5.3 *K Factor carry over*

Refer to section 9.4 of the Submission for further explanation.

### 3.5.4 *Benefit sharing allowance*

GasNet has included in its revenue requirement an allowance reflecting efficiency gains made in the Second Access Arrangement Period. Table 3-7 shows the benefit sharing allowance for the Third Access Arrangement Period.

**Table 3-7: Benefit sharing allowance (\$2006 million)**

	2008	2009	2010	2011
Benefit sharing allowance	0.90	-0.69	-1.59	-0.85

Refer to section 9.5 of the Submission in relation to the calculation of the benefit sharing allowance.

### 3.5.5 *Asymmetric risk allowance*

GasNet has included in its cost of service an allowance reflecting the following asymmetric risks downside that are not adequately reflected elsewhere in the Total Revenue calculation. Table 3-8 below details each category of asymmetric risk.

**Table 3-8: Categories of Asymmetric risk (\$ 2007 p.a.)**

Asymmetric Risk	Allowance
Uplift Liability	65,000
Employment practices risk	32,000
Fraud Risk	52,000
Key person risk	37,500

Insurer's Credit Risk	1,600
Bomb Threat & Extortion	1,400
<b>Total</b>	<b>189,500</b>

### 3.5.6 Other allowances (cost of maintaining linepack and inventories)

As discussed in section 9.8 of the Submission, GasNet's other allowance consists of the following costs:

- (a) investment in passive linepack gas; and
- (b) inventories (ie the cost of holding spares and materials to deal with emergencies and standard maintenance activities).

Table 3-9 shows the costs associated with each of these items and the forecast return on these other allowances for the period 2008 to 2012.

**Table 3-9: Forecast return on working capital (\$2006 July million)**

	2008	2009	2010	2011	2012
Return on linepack	0.18	0.18	0.18	0.18	0.18
Return on inventories	0.05	0.05	0.05	0.05	0.05
<b>Total</b>	<b>0.22</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>

## 3.6 Forecast Capital Expenditure

The forecast capital expenditure for the Third Access Arrangement Period is set out in Table 3-10. An explanation of each of the items identified in Table 3-10 is provided in section 7 of the Submission.

**Table 3-10: Forecast Capital Expenditure (\$2006 Dec million)**

	2008	2009	2010	2011	2012
<b>Augmentations</b>					
Northern Zone		79.03			
Warragul (Recoverable portion)		1.46			
Pakenham		1.22			
Brooklyn Lara (Corio) pipeline	21.01				
<b>Total augmentations</b>	<b>21.01</b>	<b>81.70</b>	<b>0</b>	<b>0</b>	<b>0</b>

	2008	2009	2010	2011	2012
<b>Refurbishments and Upgrades</b>					
Gas heating facilities	5.68	1.61			
City gate works	5.85				
Pipeline upgrades	2.05	3.73	0.49	0.89	0.49
Safety and Security systems	5.04	1.24	0.40	0.40	0.58
Gooding compressor station	2.21				
Brooklyn compressor station	0.86	37.59		11.81	
Wollert compressor station		0.005			
Other compressor stations	0.35	0.68			1.62
Other	1.72	0.36	0.40	0.76	0.66
<b>Total refurbishments and upgrades</b>	<b>23.77</b>	<b>45.21</b>	<b>1.29</b>	<b>13.86</b>	<b>3.34</b>
<b>Total capex</b>	<b>44.77</b>	<b>126.91</b>	<b>1.29</b>	<b>13.86</b>	<b>3.34</b>

Note: Excludes interest during construction

### 3.7 Summary of components of revenue requirement

Table 3-11 summarises each of the components that make up GasNet's revenue requirements (Building Blocks Revenue).

**Table 3-11: Summary of components of the revenue requirement (\$2006 Dec million)**

Components of Revenue Requirement	2008	2009	2010	2011	2012
Return on assets	\$43.69	\$48.54	\$51.42	\$49.73	\$48.12
Depreciation	\$25.27	\$28.13	\$29.85	\$29.77	\$30.01
Non-capital costs	\$27.61	\$25.35	\$24.91	\$26.09	\$27.47
Net tax liability	0.00	0.00	0.00	0.00	1.73
<b>Total revenue requirement</b>	<b>\$96.57</b>	<b>\$102.01</b>	<b>\$106.18</b>	<b>\$105.60</b>	<b>\$107.34</b>

The target revenue for the period 2008 to 2012 is set out in Table 3-12.

**Table 3-12: Target Revenue (\$2006 Dec million)**

Year ending 31 December	2008	2009	2010	2011	2012
Revenue Requirement (\$m)	\$96.57	\$102.01	\$106.18	\$105.60	\$107.34
Forecast Revenue (\$m)	\$96.28	\$98.86	\$102.79	\$108.28	\$112.71

## 4 Volume Forecasts

### 4.1 Peak demand 2003-2007

The peak demand and total annual delivered volume for the period 2003-2007 is set out in Table 4-1.

**Table 4-1: Historical volumes 2003-2007<sup>1</sup>**

Demand and volume	2003	2004	2005	2006	2007
Peak Demand TJ/d	1233	1239	1248	1259	1278
10 Peak Days Injection (TJ)	10,413	10,536	10,501	11,571	12,022
Annual volume (PJ)	213.4	225.3	204.4	224.6	239.8

### 4.2 Peak demand 2008-2012

The forecast peak demand and total annual delivered volume for the period 2008 to 2012 is set out in Table 4-2.

**Table 4-2 Forecast demand 2008-2012<sup>2</sup>**

Demand and Volume	2008	2009	2010	2011	2012
Peak Demand (TJ/d)	1233	1236	1245	1253	1267
10 Peak Days Injection (TJ)	11,426	11,482	11,564	11,645	11,769
Annual Volume (PJ)	228.4	220.0	219.6	225.2	229.2

<sup>1</sup> The historical volumes are not weather normalised and exclude refill volumes.

<sup>2</sup> The forecast volumes have been weather normalised.

### 4.3 System load profile

The system load profiles in each pricing zone during 2006 is shown in section 1 of Schedule 2.

### 4.4 Annual volume across each pricing zone

The actual and forecast annual volumes across each pricing zone is set out in sections 2 to 4 of Schedule 2.

---

## 5 Reference Tariff Calculation

Refer to section 11 of the Submission for a discussion of GasNet's Reference Tariff methodology.

---

## 6 Key Performance Indicators

Table 6.1 sets out comparative key performance indicators.

**Table 6-1: Comparative KPIs**

Pipeline	Opex/ORC	Opex/km (\$)
Moomba Sydney Pipeline	1.80%	9,404
Roma to Brisbane Pipeline	2.05%	9,691
Dampier Bunbury Pipeline	2.18%	21,677
Moomba Adelaide Pipeline	2.41%	15,262
Goldfields Gas Pipeline	3.20%	10,450
GasNet 2008	2.22%	11,221
GasNet 2012	2.12%	12,195

Refer to section 13 of the Submission for a discussion of GasNet's key performance indicators.

---

## 7 Price Control

### 7.1 Temperature Sensitivity

The target temperature sensitivity (TJ/EDD) for the period 2008 to 2012 is set out in Table 7-1.

**Table 7-1: Temperature Sensitivity (TJ/EDD)**

Temperature Sensitivity	2008	2009	2010	2011	2012
	44.7	44.7	45.1	45.6	45.6

## 7.2 Effective Degree Days

The EDD for the period 2008 to 2012 is set out in Table 7-2.

**Table 7-2: Effective Degree Days**

EDD	2008	2009	2010	2011	2012
	1340	1340	1340	1340	1340

## 8 Interpretation

### 8.1 Reference to Access Arrangement

Terms that are capitalised but not otherwise defined in this AA Information have the meaning given in the Code, the Access Arrangement or the Submission (as applicable).

### 8.2 Glossary

**AA Information** means this Access Arrangement Information in support of GasNet's Access Arrangement for the Third Access Arrangement Period lodged with the Regulator.

**CCA** means current cost accounting.

**Code** means the National Third Party Access Code for Natural Gas Pipeline Systems.

**EDD** means Effective Degree Days as defined in the VENCORP 2006 APR.

**GasNet** means, subject to section 1.3.4 of the Submission, GasNet Australia (Operations) Pty Ltd ABN 65 083 009 278.

**Interconnect Pipeline** means the pipeline constructed by GasNet from Barnawartha in Victoria to Culcairn in New South Wales.

**PTS** means the Gas Transmission System as defined in the Service Envelope Agreement.

**Regulator** means the Relevant Regulator under the Code which is currently the Australian Competition and Consumer Regulator.

**Second Access Arrangement** means the access arrangement (including any revisions) for the Second Access Arrangement Period.

**Second Access Arrangement Period** means the Access Arrangement Period commencing on 1 January 2003 and ending on 31 December 2007 relating to access arrangement (including any revisions) for the Second Access Arrangement Period.



**Submission** means the access arrangement submission (and all schedules and annexures) in support of GasNet's Access Arrangement for the Third Access Arrangement Period dated 14 May 2007.

**SWP** means the pipelines in Southwest Victoria comprising the South West Link (from Lara near Geelong to Iona near Port Campbell), the Western System Link (from Iona to North Paaratte, both near Port Campbell) and associated facilities, including the Lara, Iona and Brooklyn city gates and the Iona compressor station.

**Third Access Arrangement Period** means the Access Arrangement Period for GasNet commencing on 1 January 2008 and ending on 31 December 2012.

**VENCorp** means Victorian Energy Networks Corporation.

**VENCorp APR** means the Annual Gas Planning Report for the forecast period 2007-2011, prepared by VENCorp and published in November 2006.

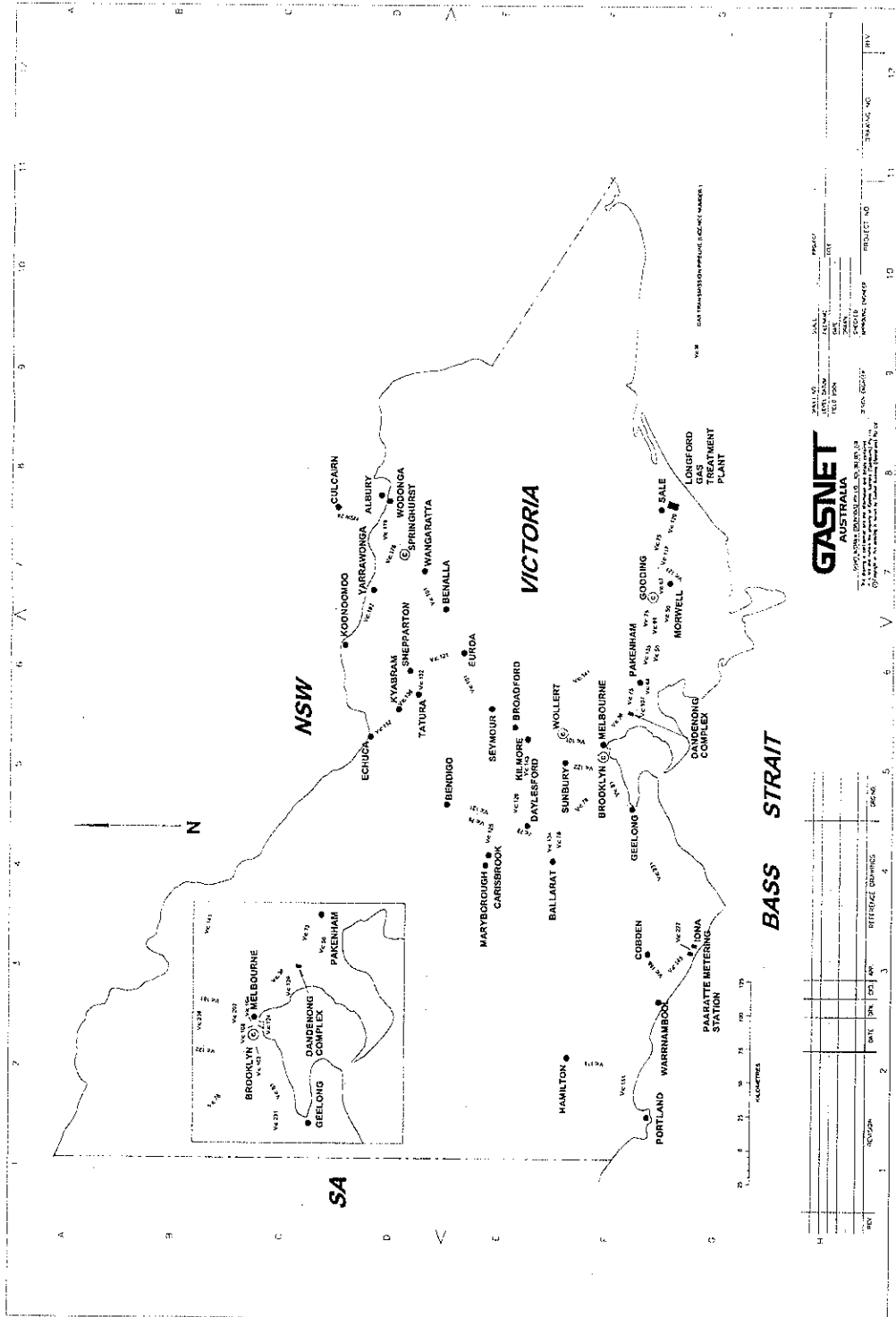
**WACC** means weighted average cost of capital.

**WUGS** means the Western Underground Gas Storage located at Iona.

# GasNet Australia Access Arrangement Information

## Schedule 1 - Description of PTS

### 1 Map of PTS



## 2 Description of pipelines

Pipeline Licence	Location/Route	Length (km)	Pipe Diameter (mm)	MAOP (kPa)
	<i>Longford to Dandenong and Wollert System</i>			
Vic:68	Healesville-Koo-Wee-Rup Rd	1.2	80	2760
Vic:91	Anderson St, Warragul	4.8	100	2760
Vic:107	Pound Rd to Tuckers Rd	2.0	100	2760
Vic:50	Supply to Jeeralang	0.4	300	2760
Vic:50	Morwell to Dandenong	126.8	450	2760
Vic:75	Longford to Dandenong	174.2	750	6890
Vic:117	Rosedale to Tyers	34.3	750	7070
Vic:120	Longford to Rosedale	30.5	750	7070
Vic:135	Bunyip to Pakenham	18.7	750	7070
Vic:141	Pakenham to Wollert	93.1	750	6890
Vic:121	Tyers to Morwell	15.7	500	7070
Vic:67	Maryvale	5.4	150	6890
	<i>Wollert to Wodonga/Echuca/Bendigo System</i>			
Vic:101	Keon Park to Wollert	14.1	600	2760
Vic:202	Keon Park East - Keon Park West	0.6	450	2760
Vic:101	Wollert to Wodonga	269.4	300	7400
Vic:101	Euroa to Shepparton	34.5	200	7400
Vic:132	Shepparton to Tatura	16.2	200	7390
Vic:136	Tatura to Kyabram	21.3	200	7390
Vic:152	Kyabram to Echuca	30.7	150	7390
Vic:143	Wandong to Kyneton	59.5	300	7390
Vic:128	Mt Franklin to Kyneton	24.5	300	7390
Vic:131	Mt Franklin to Bendigo	50.8	300	7390
Vic:78	Ballan to Bendigo	90.8	150	7390
Vic:125	Guildford to Maryborough	31.4	150	7390
Vic:238	Somerton Pipeline	3.4	250	2760
Vic:176	Chiltern Valley to Rutherglen	14.7	200	7400
Vic:182	Rutherglen to Koonoomoo	88.8	200	7400
Vic:178	Barnawartha to Murray River	5.5	450	10200
NSW:24	Murray River to Culcairn	57.0	450	10200

Pipeline Licence	Location/Route	Length (km)	Pipe Diameter (mm)	MAOP (kPa)
	<i>Brooklyn to Ballarat System</i>			
Vic:78	Brooklyn to Ballan	66.6	200	7390
Vic:78	Ballan to Ballarat	22.7	150	7390
Vic:134	Ballan to Ballarat	22.8	300	7390
Vic:122	Derrimut to Sunbury	24.0	150	7390
	<i>Brooklyn to Geelong System</i>			
Vic:81	Brooklyn to Corio	50.7	350	7390
Vic:162	Laverton to BHP	1.6	150	2760
Vic:253	Lateral to Snowy Hydro	1.6	350	10,200
Vic:266	Brooklyn to Lara	58.0	500	10,200
	<i>Dandenong to West Melbourne / Brooklyn System</i>			
Vic:36	Dandenong to West Melbourne	36.2	750	2760
Vic:108	South Melbourne to Brooklyn	12.8	750	2760
Vic:129	Princess Hwy to Henty St	0.2	500	2760
Vic:129	Dandenong to Princess Hwy	5.0	750	2760
Vic:36	Princess Hwy to Regent St	0.8	200	2760
Vic:164	Supply to Bay St To Unichema	0.4	150	2760
Vic:124	Supply to Newport Power Station	1	450	2760
	<i>Western Network</i>			
Vic:145	Paaratte to Allansford	33.3	150	7400
Vic:155	Allansford to Portland	100.4	150	9890
Vic:168	Curdievale to Cobden	27.7	150	9890
Vic:171	Codrington to Hamilton	54.6	150	9890
Vic:212	Lateral to Iluka Plant	1.1	100	9,890
	<i>South West Pipeline</i>			
Vic:227	Iona to Paaratte	7.8	150	7400
Vic:231	Iona to Lara	143.9	500	10200

# GasNet Australia Access Arrangement Information

## Schedule 2 - System load profile and Annual volume

### 1 Total Deliveries by month 2006 (TJ)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
LaTrobe	733	680	748	797	889	880	863	889	864	844	873	672	9,732
Tyers	238	66	49	118	193	210	133	100	149	75	100	59	1,490
VicHub Exports	0	0	0	15	441	53	18	0	2	0	0	0	530
Lurgi	94	86	90	141	180	207	219	218	190	174	141	114	1,858
Metro NW	4,960	4,614	5,164	7,215	10,114	11,902	11,357	10,554	8,097	7,560	6,930	5,611	94,079
Metro SE	3,215	3,214	3,734	6,863	9,775	11,909	11,718	10,000	7,423	5,918	5,059	3,809	82,636
Calder	343	400	454	810	1,163	1,307	1,349	1,168	907	686	564	425	9,577
Sth Hume	29	32	38	75	115	138	136	118	87	62	50	34	914
Echuca	341	527	586	458	493	496	507	519	450	430	352	307	5,468
Nth Hume	56	74	84	121	181	217	210	204	144	108	85	60	1,544
Wodonga	258	213	244	377	544	635	606	580	428	340	308	274	4,807
Murray Valley	53	62	71	80	126	141	134	127	93	80	64	51	1,083
Interconnect	0	0	0	0	1	1	1	1	1	0	0	0	6
Culcairn Exports	391	394	303	387	456	52	118	142	371	322	488	180	3,605
SWP	15	16	17	29	39	43	45	41	33	29	22	18	347
SEA Gas	0	98	210	289	117	453	625	441	107	50	6	0	2,396
UGS Refill	383	15	43	76	37	6	192	47	85	4	1	1	891
LNG Refill	8	5	6	3	5	38	54	104	46	33	16	18	335
Warrnambool	112	100	108	112	159	191	204	191	171	155	144	114	1,761
Koroit	75	63	59	48	49	76	92	95	98	99	91	80	924
Western	110	93	107	138	151	171	198	190	179	171	160	142	1,812
<b>Total</b>	<b>11,415</b>	<b>10,753</b>	<b>12,117</b>	<b>18,153</b>	<b>25,227</b>	<b>29,126</b>	<b>28,780</b>	<b>25,728</b>	<b>19,927</b>	<b>17,140</b>	<b>15,455</b>	<b>11,970</b>	<b>225,793</b>

## 2 Actual and forecast annual volumes (TJ)

	Actual										Forecast					
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2008	2009	2010	2011	2012
LaTrobe	12,223	10,028	10,422	10,009	9,732	17,542	5,246	2,069	2,038	2,170	2,289					
Maryvale						0	6,401	6,602	6,875	6,988	7,071					
Tyers		1,938	3,516	1,052	1,490	2,653	1,067	2,362	1,669	2,090	2,695					
VicHub Exports		319	96	1,197	530	161	300	300	300	300	300					
Lurgi	1,548	1,549	1,556	1,638	1,858	1,783	1,914	2,245	2,295	2,341	2,358					
Metro NW	164,358	88,086	99,094	85,017	94,079	110,936	85,190	76,316	75,391	77,981	79,898					
Geelong						0	15,018	14,533	14,724	15,115	15,247					
Metro SE		80,744	80,662	74,815	82,636	75,608	80,759	80,568	80,804	81,911	82,764					
Calder	9,150	9,674	9,842	9,285	9,577	9,050	10,315	10,348	10,459	10,616	10,682					
Sth Hume	761	828	844	863	914	867	1,037	1,141	1,248	1,361	1,469					
Echuca	5,684	5,684	5,456	5,594	5,468	4,962	5,398	5,334	5,393	5,502	5,532					
Nth Hume	6,400	1,746	1,752	1,546	1,544	1,517	1,569	1,558	1,567	1,588	1,592					
Wodonga		5,156	5,003	4,874	4,807	4,707	4,828	4,782	4,823	4,904	4,924					
Murray Valley	727	810	821	889	1,083	1,055	1,080	1,068	1,079	1,099	1,104					
Interconnect		7	6	5	6	5	6	6	6	6	6					
Culcairn Exports	3,123	1,919	1,629	2,817	3,605	3,565	3,380	5,840	5,840	5,840	5,840					
SWP	0	329	338	330	347	325	296	291	293	298	301					
SEA Gas		187	1	0	2,396	610	0	0	0	0	0					
UGS Refill	1,991	914	18,310	9,438	891	6,014	500	500	500	500	500					
LNG Refill		0	2	100	335	502	300	300	300	300	300					
Warrnambool		1,657	1,726	1,722	1,761	1,631	1,713	1,751	1,776	1,894	1,910					
Koroit		803	818	915	924	961	896	925	948	1,002	1,010					
Western	4,391	1,694	1,728	1,791	1,812	1,909	1,954	2,006	2,043	2,170	2,189					
<b>Total</b>	<b>210,355</b>	<b>214,072</b>	<b>243,621</b>	<b>213,899</b>	<b>225,793</b>	<b>246,363</b>	<b>229,167</b>	<b>220,845</b>	<b>220,370</b>	<b>225,976</b>	<b>229,982</b>					

3 Forecast D & V Annual Volumes (TJ)

	2008			2009			2010			2011			2012		
	D	V	Total	D	V	Total	D	V	Total	D	V	Total	D	V	Total
LaTrobe	1,945	302	5,246	1,768	301	2,069	1,735	303	2,038	1,861	310	2,170	1,979	310	2,289
Maryvale	6,401	0	6,401	6,602	0	6,602	6,875	0	6,875	6,988	0	6,988	7,071	0	7,071
Tyers	317	749	1,067	1,615	747	2,362	918	751	1,669	1,321	769	2,090	1,924	771	2,695
VicHub Exports	300	0	300	300	0	300	300	0	300	300	0	300	300	0	300
Lurgi	727	1,187	1,914	1,062	1,183	2,245	1,105	1,190	2,295	1,124	1,218	2,341	1,137	1,220	2,358
Metro NW	47,700	37,489	85,190	38,592	37,725	76,316	37,497	37,894	75,391	39,707	38,274	77,981	41,181	38,716	79,898
Geelong	9,471	5,547	15,018	8,990	5,543	14,533	9,176	5,548	14,724	9,511	5,605	15,115	9,572	5,674	15,247
Metro SE	22,421	58,338	80,759	21,883	58,685	80,568	21,858	58,947	80,804	22,403	59,508	81,911	22,594	60,170	82,764
Calder	3,183	7,131	10,315	3,150	7,198	10,348	3,232	7,226	10,459	3,298	7,318	10,616	3,313	7,369	10,682
Sth Hume	195	842	1,037	192	949	1,141	195	1,052	1,248	201	1,160	1,361	203	1,267	1,469
Echuca	3,816	1,582	5,398	3,749	1,584	5,334	3,814	1,579	5,393	3,925	1,577	5,502	3,959	1,573	5,532
Nth Hume	737	832	1,569	724	833	1,558	737	830	1,567	758	829	1,588	765	828	1,592
Wodonga	2,841	1,988	4,828	2,791	1,991	4,782	2,839	1,984	4,823	2,922	1,981	4,904	2,947	1,977	4,924
Murray Valley	696	384	1,080	684	385	1,068	695	383	1,079	716	383	1,099	722	382	1,104
Interconnect	6	0	6	6	0	6	6	0	6	6	0	6	6	0	6
Culcairn Exports	3,380	0	3,380	5,840	0	5,840	5,840	0	5,840	5,840	0	5,840	5,840	0	5,840
SWP	93	203	296	88	203	291	90	203	293	93	205	298	94	208	301
SEA Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
UGS Refill	500	0	500	500	0	500	500	0	500	500	0	500	500	0	500
LNG Refill	300	0	300	300	0	300	300	0	300	300	0	300	300	0	300
Warmambool	1,043	669	1,713	1,079	672	1,751	1,106	670	1,776	1,168	726	1,894	1,178	732	1,910
Koroit	854	42	896	883	42	925	906	42	948	956	45	1,002	965	46	1,010
Western	1,475	479	1,954	1,525	481	2,006	1,563	480	2,043	1,650	520	2,170	1,665	524	2,189
<b>Total</b>	<b>111,403</b>	<b>117,764</b>	<b>229,167</b>	<b>102,322</b>	<b>118,523</b>	<b>220,845</b>	<b>101,287</b>	<b>119,083</b>	<b>220,370</b>	<b>105,548</b>	<b>120,428</b>	<b>225,976</b>	<b>108,214</b>	<b>121,769</b>	<b>229,982</b>

#### 4 Forecast 10 Peak Day Injection Volumes (TJ)

	2008	2009	2010	2011	2012
Longford	8,134	8,134	8,134	8,134	8,134
Pt Campbell	2,312	2,473	2,602	2,716	2,839
Culcain	323	219	171	139	139
Pakenham	656	656	656	656	656
<b>Total</b>	<b>11,426</b>	<b>11,482</b>	<b>11,564</b>	<b>11,645</b>	<b>11,769</b>