

for the Wagga Wagga
Natural Gas Distribution Network



1 January 2006



Table of Contents

1. INTRODUCTION AND BACKGROUND.....	1
1.1 Basis for Access Arrangement Information	1
1.2 Content of this Access Arrangement Information	1
1.3 Interpretation	2
1.4 Contact Details	2
2. BACKGROUND TO THE NETWORK	3
2.1 Country Energy and the Wagga Wagga Network.....	3
2.2 The First Access Arrangement Period.....	3
2.2.1 Expenditure, revenue and volume outcomes	3
2.2.2 Operation of the First Access Arrangement	5
2.3 Material Changes compared to the First Access Arrangement.....	5
2.4 Physical Characteristics of the Network	6
2.4.1 Network description	6
2.4.2 Network Operation.....	7
2.4.3 Network Capacity	7
3. SERVICES TO BE OFFERED	8
3.1 Reference Services	8
3.1.1 Contract Transportation Service	8
3.1.2 Volume Transportation Service	9
3.1.3 Additional Services	9
3.2 Negotiated Services	10
3.3 Service Standards and Quality	10
4. CAPITAL COSTS	11
4.1 The Opening Capital Base	11
4.1.1 Initial Capital Base.....	11
4.1.2 New Facilities Investment for the First Access Arrangement Period..	11
4.1.3 Regulatory Depreciation for the First Access Arrangement Period...	11
4.1.4 Redundant Capital and Asset Disposals	12
4.1.5 Opening Capital Base.....	12
4.2 The Forecast Capital Base	13
4.2.1 Capital Expenditure	13
4.2.2 Asset Sales and Redundant Capital.....	14
4.2.3 Depreciation	15
4.2.4 The Projected Capital Base	16
4.3 Cost of Capital.....	16
4.3.1 Summary of WACC parameters and WACC range	16

4.4	Return on Capital	17
4.5	Return on Working Capital	17
5.	OPERATING AND MAINTENANCE (NON-CAPITAL) COSTS	18
5.1	Overview	18
5.2	Projected Operating and Maintenance Expenditure.....	18
6.	FORECAST DEMAND FOR SERVICES	20
6.1	Overview of Gas Demand in Wagga Wagga.....	20
6.2	Forecast	21
7.	TOTAL REVENUE REQUIREMENT AND X FACTORS	22
7.1	Total revenue requirement	22
7.2	X Factors	22
8.	REFERENCE TARIFFS AND REFERENCE TARIFF POLICY	23
8.1	Calculation of Reference Tariffs	23
8.1.1	Allocation of Total Revenue Requirement to Services	23
8.1.2	Reference Tariff Structure	24
8.1.3	Overruns	25
8.1.4	Unaccounted for Gas.....	25
8.2	Reference Tariff Policy	25
8.2.1	Form of Price Control	25
8.2.2	Pass-Throughs	26
8.2.3	Addition and Deletion of Tariffs	26
9.	TERMS AND CONDITIONS	28
10.	OTHER MATTERS	29
10.1	Revisions Submissions and Commencement Date.....	29
10.2	Capacity Management Policy	29
10.3	Queuing Policy	29
10.4	Extensions/Expansions Policy.....	29
11.	KEY PERFORMANCE INDICATORS	31

1. INTRODUCTION AND BACKGROUND

1.1 Basis for Access Arrangement Information

This *Access Arrangement Information* has been prepared by Country Energy Gas Pty Ltd ACN 083 199 839 (*Country Energy Gas*) in accordance with the requirements of the National Third Party Access Code for Natural Gas Pipeline Systems (the *Code*) and applies to *Country Energy Gas*' natural gas distribution system serving Wagga Wagga and surrounding areas (the *Network*).

This *Access Arrangement Information* should be read in conjunction with the accompanying *Access Arrangement*.

1.2 Content of this Access Arrangement Information

The purpose of this document is to set out such information as is necessary to enable *Users* and *Prospective Users* to understand the derivation of the elements of the *Access Arrangement* and to form an opinion as to the compliance of the *Access Arrangement* with the provisions of the *Code*.

In accordance with section 2.7 of the *Code* this *Access Arrangement Information* includes the categories of information described in Attachment A to the *Code*. However, in accordance with section 2.8 of the *Code* some information has been categorised or aggregated to ensure that it is not unduly harmful to *Country Energy Gas*' legitimate business interests.

This document is structured as follows:

Section 2 provides background to the *Network*, the operation of the *Network* and the *Access Arrangement* in the period to 31 December 2004, and summarises key changes in the proposed *Access Arrangement* compared to the *First Access Arrangement Period*.

Section 3 outlines the *Services* to be offered to *Users* and *Prospective Users*.

Section 4 provides information on how the *Capital Base* has been calculated and how the return on capital, return of capital, and working capital elements have been calculated.

Section 5 provides information regarding forecast *Non-Capital Costs*.

Section 6 summarises *Country Energy Gas*' forecasts of demand for *Services*.

Section 7 brings together sections 4 to 6 and explains how the total revenue requirement has been calculated.

Section 8 outlines how total costs have been allocated to *Services* to determine *Reference Tariffs*, and the rationale behind the proposed *Reference Tariff Policy*.

Section 9 provides background to the proposed *Terms and Conditions* that will apply to the provision of *Services*.

Section 10 addresses a number of miscellaneous matters, including the length of the *Access Arrangement Period*, and the manner in which capacity will be managed across the regulatory period.

1.3 Interpretation

In this *Access Arrangement Information* where a word or phrase is capitalised and italicised the term has the meaning set out in the *Code*, unless the word or phrase is defined in the Glossary which forms part of the *Access Arrangement*. In such a case the word or phrase has the meaning given to that word or phrase in the Glossary.

Further, in this *Access Arrangement Information* headings are for convenience only and do not affect interpretation, and unless the context indicates a contrary intention:

- (a) a reference to any party includes that party's executors, administrators, successors, substitutes and assigns, including any person taking by way of novation;
- (b) a reference to this *Access Arrangement Information*, the *Access Arrangement* or to any other agreement, deed or document (including, without limitation any standard, code, guidelines or rule) includes, respectively, this *Access Arrangement Information*, *Access Arrangement* or that other agreement, deed or document as amended, novated, supplemented, varied or replaced from time to time;
- (c) words importing the singular include the plural (and vice versa), words denoting a given gender include all other genders, and words denoting individuals include corporations (and vice versa);
- (d) unless the context indicates otherwise, a reference to a section is a reference to a section of this *Access Arrangement Information*;
- (e) references to currency are references to Australian currency unless otherwise specifically provided; and
- (f) reference to any legislation or to any section or provision thereof includes any statutory modification or re-enactment or any statutory provision substituted for it, and ordinances, by-laws, regulations, and other statutory instruments issued thereunder.

1.4 Contact Details

General enquiries regarding this *Access Arrangement Information* and the *Access Arrangement* should be directed to:

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2. BACKGROUND TO THE NETWORK

2.1 Country Energy and the Wagga Wagga Network

Gas has been available in Wagga Wagga since the late 1880s. Manufactured gas was provided from this time until 1981 when supplies from the Cooper Basin became available. Gas supply was managed by the Wagga Wagga City Council until the system was acquired by Great Southern Energy in June 1997.

Great Southern Energy, along with Advance Energy and NorthPower, were merged together to form Country Energy on 1 July 2001. As part of this merger *Country Energy Gas* became the owner and operator of the Wagga Wagga gas network.

Key extensions and expansions to the network in recent times include the construction of a second connection to the East Australia Pipeline Ltd transmission line, and the extension of the network to the township of Uranquinty. At present the network serves over 18,000 predominately domestic and small commercial customers, although several large *Contract Customers* account for around 43% of total gas sales.

2.2 The First Access Arrangement Period

Following a relatively lengthy process, the *First Access Arrangement* was drafted and approved by *IPART* and came into effect on 1 October 1999.

The *First Access Arrangement* was designed to operate until the end of 2003 however following a request from *Country Energy Gas*, *IPART* agreed to extend its operation to 31 December 2004, and to amend the date at which revisions were required to be submitted to 31 December 2003. Through subsequent extensions, the *First Access Arrangement* operated until 31 December 2005.

2.2.1 Expenditure, revenue and volume outcomes

The tariffs and other arrangements set out in *IPART*'s final approval of the *First Access Arrangement* were based upon a number of factors, including forecasts of capital and operating expenditure, and gas sales. A brief summary of the outcomes of the *First Access Arrangement Period* is set out below.

Volume of Gas Sold

Gas sales to *Contract Customers* were relatively stable, although substantially less than forecast, due both to less usage than forecast by most customers, and the loss of one major customer.

Volume Customer consumption was also less than forecast. This occurred despite substantially higher customer numbers than forecast due to substantial growth in the Wagga Wagga housing market. The lower usage may be attributed predominately to relatively warmer winter weather, decreasing number of persons per household, and reverse cycle electric air conditioners displacing gas for space heating.

Capital Expenditure

In aggregate capital expenditure was substantially higher than forecast. Areas where expenditure exceeded forecast included the following:

- due to concerns regarding system security *Country Energy Gas* brought forward the completion of the Southern gate station, which was originally scheduled to be completed in the forthcoming regulatory period. This has improved security of supply. The Rail Infrastructure Corporation has advised *Country Energy Gas* that major repairs to the Murrumbidgee rail bridge are anticipated to occur in 2005. Without the second gate station these repairs have the potential to create a substantial disruption to supply, at a time during the peak gas usage season. The second gate station not only provides additional security of supply but has also resolved pressure/supply problems in the southern areas of the Network, thus improving the standard of service to many customers;
- subsequent to the *First Access Arrangement* being approved, *Country Energy Gas* found that the extension of the *Network* to Uranquinty would pass the economic feasibility test in the *Code*, particularly if constructed in conjunction with the completion of the southern gate station;
- significantly higher connections to the network than forecast. The main driver for this was the unprecedented growth in new housing connections created as a result of low interest rates and the introduction of the first home buyers grant. Effective marketing of gas to developers by *Country Energy Gas* also resulted in relatively high penetration rates for these new homes;
- additional costs associated with the introduction of full retail contestability. This expenditure has been deemed to be prudent by *IPART* following a review by PB Associates; and
- expenditure associated with *Country Energy Gas*' Asset Management and Operating Support System (AMOSS). This system will support the gas distribution business and provide the necessary system related data to enable more efficient network management and operation.

The need to harness resources and divert expenditure to the areas described above resulted in expenditure on other items being less than forecast. For example, asset renewal and replacement expenditure was less than forecast.

Operating Expenditure

The regulatory regime provided *Country Energy Gas* with a strong incentive to ensure operating expenditure was at efficient levels, as additional expenditure within a regulatory period cannot be recouped from customers. Operating expenditure, in aggregate, was close to levels forecast by *IPART*, although under-spending in the first years of the regulatory period was offset by higher expenditure in the later years. This higher spending has occurred largely as a result of a number of events that have been outside *Country Energy Gas*' control:

- higher than forecast growth in the network (including the Uranquinty extension) and number of customers served. This has resulted in higher system operating and maintenance costs;
- more detailed and onerous regulatory compliance requirements;
- the introduction of a number of codes and guidelines relating to the management and operation of the *Network*, including those set out in section 2.2.2 below;
- increased insurance costs, particularly since 2001, associated with increased risk of terrorism and corporate collapses in the Australian insurance market;
- additional costs associated with the introduction and implementation of full retail contestability;
- administrative costs associated with the introduction of the GST;
- increased workplace health and safety related standards;
- labour market conditions have resulted in wages increasing above the CPI, particularly in NSW;
- increased security costs; and
- the addition of the second (Southern) gate station.

As the majority of these events are not once-off items, but rather have created a 'step' increase in expenditure, they will also be reflected in operating expenditure for the next regulatory period.

2.2.2 Operation of the First Access Arrangement

The *First Access Arrangement* has proved relatively robust, although in many areas its operation has been untested due to the very limited interest in seeking access from third parties. During the *First Access Arrangement Period*:

- only 1 request for access to the *Network* was made;
- no queues for access to *Services* were formed;
- no requests for trading of *Capacity* were made; and
- the curtailment procedures set out in the *First Access Arrangement* were not invoked.

Since the commencement of the *First Access Arrangement* on 1 October 1999, a number of additional compliance and other regulatory obligations have been imposed on NSW gas distribution businesses. These include obligations imposed by *IPART* and the NSW Government pursuant to the *Gas Act* and the licensing regime, and cover matters such as:

- the introduction of full retail competition;
- the introduction of the Gas Supply (Natural Gas Retail Competition) Regulation 2001;
- the introduction of the *Gas Network Code* for full retail competition on 20 December 2001; and
- the establishment of the *Gas Retail Market Business Rules* on 23 May 2003.

2.3 Material Changes compared to the First Access Arrangement

The *Access Arrangement* has proven relatively robust throughout the *First Access Arrangement Period*, and as a result the proposed *Access Arrangement* does not

incorporate major changes. Nevertheless, aside from the changes to deal with the matters set out in section 2.2, a number of amendments have been incorporated, with key differences including:

- amendments to the *Access Arrangement*, and particularly the standard *Reference Service Agreement*, to ensure consistency with the new codes and rules noted above;
- the inclusion of the Uranquinty distribution system in the *Capital Base*;
- removal of the *Queuing Policy*;
- clarification of *Additional Services*;
- separate definition of the *Contract Transportation Service* and the *Volume Transportation Service*;
- better defined arrangements for annual tariff changes and adjustments associated with pass-through events;
- the adoption of a tariff basket approach to establishing tariffs, and the ability for *Country Energy Gas* to introduce and delete tariffs;
- a simpler and more flexible approach to charging for *Overruns*; and
- changes to the extensions/expansions policy, including the removal of the 1km limit to extensions automatically being covered and clarification of arrangements for developers in new subdivisions to fund or construct new pipelines.

2.4 Physical Characteristics of the Network

2.4.1 Network description

Gas enters the *Network* through city gates located at Bomen and Uranquinty where it is preheated to approximately 35°C. The pressure at each city gate is reduced from approximately 7000kPa to approximately 1000kPa. The Bomen City Gate incorporates twin streams of two stage pressure reduction regulators with monitor override. A relief valve is also installed. The Uranquinty Gate comprises of a single stream single stage pressure reduction using an active/monitor configuration with over pressure protection.

The gas is then supplied from the City Gates via steel mains (API 5L) to the various supply districts in Wagga Wagga. Each district is supplied through a district regulator. The domestic metering pressure in Wagga Wagga is predominately 1.5kPa, however 2.75kPa can be found in some districts. Industrial & Commercial metering pressures will vary from 7kPa to 100kPa. Large *Contract Customers* are typically supplied from the high pressure steel mains.

A schematic diagram of the *Network* is set out in the *Access Arrangement*.

2.4.2 Network Operation

Country Energy Gas operates the *Network* at various pressures depending on the location and the piping medium. As set out in section 4, a rehabilitation program is in place which is targeting older areas using insertion or replacement of galvanised steel and cast iron piping systems. System pressures will be increased as the rehabilitation program is progressed. The reticulation system operates under the following pressure regime:

High Pressure - >400-1050 kPa

Medium High Pressure – 80-400 kPa

Medium Low Pressure – 7-80 kPa

Low Pressure - 7 kPa

2.4.3 Network Capacity

Peak flows within the system generally occur during normal business days at around 9 - 10am. Hourly flow rates of up to 19,000 standard cubic metres per hour have been registered at various winter peak times over the past several years. Coincident peak demand is driven by the temperature sensitive volume load and hence occurs in winter.

3. SERVICES TO BE OFFERED

Sections 3.1 and 3.2 of the *Code* require *Country Energy Gas* to provide a *Services Policy* which describes one or more *Services* that *Country Energy Gas* will make available to *Users* or *Prospective Users*, including:

one or more *Services* that are likely to be sought by a significant part of the market;
and

any *Service* or *Services* which in *IPART's* opinion should be included in the *Services Policy*.

Consistent with the *First Access Arrangement Period*, *Country Energy Gas* proposes to offer a *Contract Transportation Service* and a *Volume Transportation Service* to *Users*. These *Services*, which are likely to be sought by a significant part of the market, will be *Reference Services* and will attract a *Reference Tariff*.

Country Energy Gas also proposes to offer six non-transportation *Services* in the *Access Arrangement Period*, known as *Additional Services*

As in the *First Access Arrangement Period*, *Country Energy Gas* will continue to offer *Negotiated Services* to *Users*.

3.1 Reference Services

As noted above, *Country Energy Gas* will continue to offer the same *Transportation Reference Services* as in the *First Access Arrangement Period*. *Country Energy Gas* has not received any requests for other forms of *Transportation Reference Services*, and is not aware of any changes in circumstances or future developments that suggest that these *Services* will not continue to be sought by a significant part of the market during the *Access Arrangement Period*.

3.1.1 Contract Transportation Service

The *Contract Transportation Service* is provided to the *User* in respect of the *Delivery Point* of a *Contract Customer* and consists of:

- (a) receiving natural gas at a *Receipt Point*;
- (b) transporting the natural gas from a *Receipt Point* through the *Network*;
- (c) delivering the natural gas to the *Delivery Point*;
- (d) installing, maintaining and repairing *Metering Facilities* at the *Delivery Point*;
- (e) reading the *Metering Facilities* at the *Delivery Point* at a frequency of 24 hours; and
- (f) providing data, including metering data, to the *User* and other entities in accordance with the requirements of the *Gas Retail Market Business Rules*.

A *Contract Customer* is a *Customer* who has (or is reasonably expected by *Country Energy Gas* to have) an annual consumption of 10TJ or greater at a single *Delivery Point* provided that if a *Contract Customer* has an annual consumption of less than 10TJ for a period of two consecutive years, the *Contract Customer* will remain a *Contract Customer* for that period. *Country Energy Gas* may at the end of the period

of two consecutive years classify the *Contract Customer* as a *Volume Customer* upon providing the *Customer* with written notice.

If *Country Energy Gas* classifies a *Customer* as a *Volume Customer* in accordance with this section 2.3.1, *Country Energy Gas* may remove the *Communications Equipment* from the *Customer's Metering Facilities*.

3.1.2 Volume Transportation Service

The *Volume Transportation Service* is provided to the *User* in respect of the *Delivery Point* of a *Volume Customer* and consists of:

- (a) receiving natural gas at a *Receipt Point*;
- (b) transporting the natural gas from a *Receipt Point* through the *Network*;
- (c) delivering the natural gas to the *Delivery Point*;
- (d) installing, maintaining and repairing *Metering Facilities* at the *Delivery Point*;
- (e) reading the *Metering Facilities* at the *Delivery Point* at a frequency of at least quarterly;
- (f) providing data, including metering data, to the *User* and other entities in accordance with the requirements of the *Gas Retail Market Business Rules*; and
- (g) in the case of a *Customer* who is not connected to the *Network*, the provision of up to 50 metres of pipeline from the *Network* to the nearest point on the *Customer's* property, where the provision of such pipeline is consistent with the *Extensions/Expansions Policy* set out in section 7 and results in the economic feasibility test in section 8.16(b)(i) of the *Code* being passed.

Subject to section 2.3.1, a *Volume Customer* is a *Customer* who has (or is reasonably expected by *Country Energy Gas* to have) an annual consumption of less than 10TJ at a single *Delivery Point*.

3.1.3 Additional Services

The following *Additional Services* are offered:

- (1) a *Residential Meter Testing Service*;
- (2) a *Special Meter Reading Service*;
- (3) a *Reconnection Service*;
- (4) a *Disconnection Service*;
- (5) a *Business Disconnection/Reconnection Service*; and
- (6) an *After Hours Reconnection Service*.

These services will be provided consistent with the requirements of the relevant regulatory codes and rules.

3.2 Negotiated Services

A *Negotiated Service* is a service that is different from a *Reference Service*. As required by the *Code*, *Country Energy Gas* will negotiate in good faith with a *User* or *Prospective User* to provide a *Negotiated Service*.

3.3 Service Standards and Quality

Country Energy Gas will provide *Services* in accordance with the service standards and the terms and conditions set out in:

- (a) the *Access Arrangement*;
- (b) the *Network Code*, as amended from time to time;
- (c) the *Gas Retail Market Business Rules*, as amended from time to time;
- (d) relevant *Laws*; and
- (e) the standard *Reference Service Agreement*, as amended by *Country Energy Gas*, from time to time.

4. CAPITAL COSTS

Category 2 of Attachment A to the *Code* requires *Country Energy Gas* to provide information on matters including asset values, depreciation and planned capital investment. This information is set out in this section 4.

4.1 The Opening Capital Base

Consistent with standard regulatory practice and the provisions of the *Code*, the opening value of the *Capital Base* at 1 January 2006 reflects:

- the initial *Capital Base* as determined by IPART as at 1 January 1999;
- **plus** actual annual capital expenditure (new facilities investment) that meets the provisions of section 8.16 of the *Code*;
- **less allowed** annual depreciation of the *Capital Base*;
- **less Redundant Capital and** asset disposals;
- **with** adjustments for changes in the CPI.

4.1.1 Initial Capital Base

The initial *Capital Base* of \$28.0m as at 1 January 1999 was determined by *IPART* when the *First Access Arrangement* was approved in 1999.

4.1.2 New Facilities Investment for the First Access Arrangement Period

New Facilities Investment over the *First Access Arrangement Period* was as follows:

Table 4.1 – New Facilities Investment in the First Access Arrangement Period (\$'000, nominal)

	1999	2000	2001	2002	2003	2004	2005 (est)
Asset replacement & refurbishment	481	758	546	275	282	453	598
Growth Related	1,232	1,648	1,275	1,447	1,885	1,750	1,079
Non-system assets, FRC	0	41	354	341	383	142	231
Southern Gate Station	0	750	983	112	23	0	0
Total	1,714	3,197	3,157	2,176	2,573	2,346	1,906

Figures in the table exclude capital contributions by third parties.

All capital expenditure incurred passed the test set out in section 8.16 of the *Code*.

4.1.3 Regulatory Depreciation for the First Access Arrangement Period

Country Energy Gas has adopted the allowed depreciation from the *First Access Arrangement*. No depreciation was forecast for the 2004 or 2005 years in the *First Access Arrangement*. For these years *Country Energy Gas* has adopted the depreciation value for 2003, increased by inflation.

The amount used for depreciation in rolling forward the *Capital Base* is therefore:

Table 4.2 – Regulatory Depreciation in the First Access Arrangement Period (\$'000 nominal)

	1999	2000	2001	2002	2003	2004	2005
Total	996	1,078	1,135	1,178	1,213	1,242	1,273

4.1.4 Redundant Capital and Asset Disposals

Country Energy Gas is not aware of any material assets that have become redundant over the *First Access Arrangement Period*. While one major *Contract Customer*, Laminex, ceased production during the period, this customer's location close to the *Bomen Gate Station* and major distribution main meant that the displaced physical infrastructure was minimal. Therefore no *Redundant Capital* has been deducted in rolling forward the *Capital Base*.

No material assets have been disposed of during the course of the *First Access Arrangement Period*.

4.1.5 Opening Capital Base

The *Capital Base* as at 31 December 2005 has therefore been calculated as follows:

Table 4.3 – Calculation of the Capital Base at 31 December 2005 (\$'000 nominal)

Calendar year ending 31 December	1999	2000	2001	2002	2003	2004	2005
Opening value	28,000	29,142	32,637	36,158	38,273	40,728	42,813
Capex/Additions (net of cap cons)	1,714	3,197	3,157	2,176	2,573	2,346	1,906
Depreciation	996	1,078	1,135	1,178	1,213	1,242	1,273
Disposals	-	-	-	-	-	-	-
Indexation	424	1,377	1,499	1,117	1,096	980	1,094
Closing value	29,142	32,637	36,158	38,273	40,728	42,813	44,541

Indexation of the *Capital Base* has taken place using the following CPI adjustment factors. These factors are based on the index number for the weighted average of eight capital cities as published by the ABS.

Table 4.4 – CPI indexation of capital base

CPI	1999	2000	2001	2002	2003	2004	2005
Total	1.47%	4.48%	4.38%	3.00%	2.77%	2.34%	2.50%

The *Capital Base* of \$44.541m at 1 January 2006 represents a 59% increase in value since 1999.

4.2 The Forecast Capital Base

The forecast *Capital Base* over the *Access Arrangement Period* reflects:

- the opening *Capital Base* as at 1 January 2006, as determined above;
- **plus** forecast annual capital expenditure (new facilities investment) that is anticipated to meet the provisions of section 8.16 of the Code;
- **less** forecast annual depreciation of the *Capital Base*;
- **less** forecast *Redundant Capital* and asset disposals;
- **with** adjustments for forecast changes in the CPI.

4.2.1 Capital Expenditure

Table 4.5 sets out *Country Energy Gas*' proposed *New Facilities Investment* over the forthcoming regulatory period.

Table 4.5 – Forecast New Facilities Investment (\$'000 real 2005-06)

	Jan to June 2006	2006-07	2007-08	2008-09	2009-10
Asset replacement & refurbishment	279	601	678	743	774
Growth Related	437	718	685	745	838
Non-system assets, FRC	122	245	245	245	245
Less Capital Contributions	(11)	(16)	(11)	(7)	(15)
Total	827	1,548	1,597	1,726	1,843

Asset replacement and refurbishment

The majority of *Country Energy Gas*' galvanised steel network was constructed between 1950 and 1980. Field data and engineering forecasts suggest that a median life of 50 years for these pipelines is likely, and probability analysis suggests that a growing proportion of the network will require replacement over the period to 2017. *Country Energy Gas* proposes to replace 2.5% of the network each year over the forthcoming regulatory period.

Country Energy Gas operates some 44 kilometres of cast iron main. The last of the cast iron mains were laid in the early 1990s and a proportion of the system has already been rehabilitated. A section of cast iron will be replaced primarily where leak survey information indicates it is prudent to replace a section of main compared to repairing individual leaks, or where insufficient capacity on the main is available.

Country Energy Gas' meter replacement costs are based on the meter replacements numbers set out in Table 4.6. Replacements occur when meters reach 15 years of age, in order to ensure compliance with the Gas Supply (Gas Meters) Regulation 2002.

Table 4.6– Meter Replacement requirements

	Jan to June 2006	2006-07	2007-08	2008-09	2009-10
Number of meters replaced	267	609	885	1,107	1,160

Growth Related

Growth related expenditure includes expenditure on new connections and new mains.

New connection expenditure is based upon the number of new connections to the system set out in the demand forecast in section 6. It includes expenditure on the connection to the main, the service pipeline, and the cost of a meter. It is assumed that a proportion of the new connections will be funded through capital contributions from customers or developers, and hence forecast expenditure is adjusted to take this into account.

Table 4.7 – Expenditure on New Connections (\$'000 real 2005-06)

	Jan to June 2006	2006-07	2007-08	2008-09	2009-10
Residential	151	238	224	249	288
Industrial/Commercial	15	31	31	31	31
Expansion Mains	221	350	331	366	420
Network Reinforcement	50	100	100	100	100
Less Capital Contributions	(11)	(16)	(11)	(7)	(15)
Total	426	702	674	738	823

Expansion mains expenditure is based upon a forecast of 25 metres of mains per new customer connection.

Non-system assets

Non-system assets includes direct expenditure on IT systems and hardware, telephones, furniture and fittings and instruments, which are required to support the gas distribution business.

Table 4.8 – Expenditure on Non System Assets (\$'000 real 2005-06)

	Jan to June 2006	2006-07	2007-08	2008-09	2009-10
IT Systems/Software	116	232	232	232	232
Computer Hardware	2	5	5	5	5
Telephones	1	1	1	1	1
Furniture & Fittings	1	2	2	2	2
Other/Instruments	2	5	5	5	5
Total	122	245	245	245	245

4.2.2 Asset Sales and Redundant Capital

No *Redundant Capital* or material asset disposals are forecast over the *Access Arrangement Period*.

4.2.3 Depreciation

Consistent with the approach adopted in the first regulatory period, depreciation has been calculated on a straight line basis utilising economic asset lives applied to the opening regulatory asset value at the beginning of each Year.

The economic asset lives, remaining lives and written down values for each asset category as at 31 December 2005 are shown in table 4.9 below. The asset lives are consistent with the assumptions used in the *First Access Arrangement*. The remaining lives of each asset class were calculated on 30 June 2005 as the sum of the written down values multiplied by the remaining lives, divided by the sum of the written down values.

Table 4.9 – Economic Asset Lives, Remaining Lives and Written Down Values at 31 December 2005

Asset Category	Useful Life (Years)	Remaining Life (Years)	WDV (\$'000 nominal)
System Assets			
Nylon Pipe	50	39	769
PE Pipe	50	39	14,638
Steel Pipe	80	64	8,350
Cast Iron Pipe	100	44	1,747
Galvanised Steel Pipe	50	14	1,719
Services	50	38	11,754
Meters & Regulators	15	10	1,813
District Regulators	40	20	1,035
Gate Stations	50	39	772
SCADA & Telemetry	20	16	387
Non System Assets			
	5	4.7	1,556

Table 4.10 below shows the opening regulatory written down values, weighted average regulatory economic lives, weighted average remaining lives, and the calculated depreciation amounts forecast for the regulatory period 1 January 2006 to 30 June 2010 for each asset class. Land & buildings and stock have not been included in the depreciation calculation.

Table 4.10 – Projected Depreciation (\$'000 nominal)

	Total Economic Life (yrs)	Average Remain. Life	WDV 31/12/05	Jan to June 2006	2006- 07	2007- 08	2008- 09	2009- 10
System Assets	56	41	42,984	534	1,113	1,166	1,222	1,284
Non-System Assets	5	4.7	1,556	30	100	155	212	272
Total			44,540	564	1,213	1,320	1,434	1,556

4.2.4 The Projected Capital Base

The *Capital Base* forecast by *Country Energy Gas* for the forthcoming regulatory period is as follows:

Table 4.11 – Projected Capital Base (\$'000 nominal)

Financial year ending 30 June	2006	2007	2008	2009	2010
Opening value	44,541	45,362	46,891	48,442	50,101
Capex/Additions (net of cap cons)	827	1,587	1,678	1,859	2,034
Depreciation	564	1,213	1,320	1,434	1,556
Disposals	-	-	-	-	-
Indexation	558	1,154	1,193	1,234	1,278
Closing value	45,362	46,891	48,442	50,101	51,857

4.3 Cost of Capital

Under section 8.30 of the *Code*, the rate of return on the *Capital Base* should

“...provide a return which is commensurate with prevailing conditions in the market for funds and the risk involved in delivering the Reference Service (as reflected in the terms and conditions on which the Reference Service is offered and any other risk associated with delivering the Reference Service).”

The appropriate rate of return or weighted average cost of capital (WACC) to apply to *Country Energy Gas' Capital Base* is intended to reflect the commercial rate of return that an investor in the *Network* would require, at a minimum, to commit to investing capital into the business.

The rate of return has been determined using the Capital Asset Pricing Model (CAPM) to establish the WACC. The WACC has been expressed in pre-tax real terms using the forward transformation method, where the tax rate applied is a statutory corporate tax rate.

4.3.1 Summary of WACC parameters and WACC range

Table 4.12 summarises the WACC parameters and range adopted by *IPART* in their final decision. Within this range, *IPART* concluded a point estimate for WACC of 6.6% was appropriate for *Country Energy Gas*.

Table 4.12 – WACC parameters adopted in IPART's final decision

Parameter	Lower limit of range	Higher limit of range
Nominal risk free rate	5.4%	5.4%
Inflation	2.8%	2.8%
Real risk free rate	2.5%	2.5%
Market Risk Premium	6.0%	6.0%
Debt Margin	1.1%	1.2%
Debt to total assets	60%	60%
Value of imputation credits (gamma)	30%	30%
Tax rate	30%	30%
Equity Beta	0.8	1.0
Pre-tax cost of debt	6.5%	6.6%
Cost of equity	10.2%	11.4%
Pre-tax real WACC	6.1%	6.7%

4.4 Return on Capital

The return on capital component of the building block has been calculated as follows:

Table 4.13 – Return on capital calculation (\$'000, nominal)

Year	Jan to June 2006	2006-07	2007-08	2008-09	2009-10
Return on Capital Base	1,446	2,987	3,089	3,195	3,308

4.5 Return on Working Capital

Country Energy Gas has included a small return on the cost of holding working capital in determining its total revenue requirement.

Table 4.14 – Return on working capital (\$'000, nominal)

Year	Jan to June 2006	2006-07	2007-08	2008-09	2009-10
Return on Working Capital	49	99	101	104	106

5. OPERATING AND MAINTENANCE (NON-CAPITAL) COSTS

5.1 Overview

Categories 3 and 4 of Attachment A to the *Code* require *Country Energy Gas* to provide information on matters including operating and maintenance costs.

Country Energy Gas has therefore prepared the following forecasts of operating and maintenance costs for the *Network*. In accordance with section 8.37 of the *Code* these costs are consistent with those that would be incurred by a prudent *Service Provider* in operating the Wagga Wagga network, acting efficiently, in accordance with accepted and good industry practice, and to achieve the lowest sustainable cost of delivering *Reference Services*. In respect of many operating cost categories, this has been achieved through market testing and tendering out of activities under medium term contractual arrangements.

As provided for in Attachment A to the *Code*, some cost categories sought in Attachment A have been aggregated for commercial and confidentiality reasons, but also to reflect that *Country Energy Gas*' information systems do not necessarily generate information under the specific category headings sought by the *Code*.

5.2 Projected Operating and Maintenance Expenditure

Table 5.1 below shows *Country Energy Gas*' forecast level of non-capital costs over the regulatory period.

Table 5.1 - Non-capital costs (\$'000, real 2005/06)

	Jan to Jun 2006	2006/07	2007/08	2008/09	2009/10	Total
Network operations and maintenance	492	983	980	978	977	4,409
Marketing	56	112	112	112	112	504
Direct gas network management	281	561	559	558	557	2,516
Corporate allocation	256	511	511	511	511	2,300
Regulatory costs	26	52	52	52	52	234
Total non-capital costs	1,112	2,218	2,214	2,210	2,209	9,963

Network operating and maintenance costs include the direct operating and maintenance costs of operating the *Network*. This category includes such things as city gate maintenance, regulator maintenance, leak repairs, inventory and supplies, network engineering, environmental management, technical assurance, subscriptions to standards and code preparation bodies, cost of gas control and network planning.

Marketing costs includes the cost of *Country Energy Gas*' promotional program, including spending to ensure new properties are connected to the network, and (predominately) the promotion of gas and gas appliances to existing connections.

Direct network gas management includes the directly attributable costs of managing the gas network. Relevant functions include asset management functions, network data and billing, and strategic planning and compliance activities.

Corporate allocation includes *Country Energy Gas*' corporate costs which have been allocated to the *Network* on a causal basis. The corporate costs include billing, accounts payable, credit control, call centres, emergency response, finance and accounting, payroll, business development, property management, customer relations, and human resources.

The manner in which these costs have been allocated to the *Network* is as follows:

- total corporate costs have been allocated to gas on the basis of an independently prepared cost allocation methodology that was developed for use in the 2002-03 regulatory accounts;
- gas corporate costs have been allocated between the gas network and gas retail functions on the basis of the relative share of revenue realised by each function; and
- gas network corporate costs have been allocated to the Wagga Wagga *Network* on the basis of the Wagga Wagga *Network*'s relative share of direct expenditure as a proportion of total gas network expenditure in 2003/04¹.

Regulatory costs includes the costs of preparing, submitting and negotiating the access arrangement with the regulator, activities in relation to *Country Energy Gas*' reticulator's licence, regulatory compliance and generally managing the interface with the regulator. The costs have been forecast on an average annual basis, although in practice regulatory costs will peak in the last two years of the regulatory period when access arrangement documentation for the next period is revised.

Country Energy Gas does not have any fuel compressors that use natural gas and therefore the annual value is nil. However, Country Energy Gas does utilise natural gas for heating purposes at the gate stations. The annual quantity of natural gas used for this purpose is approximately 4TJ and its cost is accounted for in the non-capital costs of the gas network management category.

Both direct gas network management and network operations and maintenance non-capital costs vary according to growth in customer numbers and gas throughput. All other non-capital costs remain fixed.

¹ Country Energy Gas' other networks include the systems serving towns including Cooma, Tumut, Bombala, Culcairn, Holbrook and Temora.

6. FORECAST DEMAND FOR SERVICES

Category 5 of Attachment A to the *Code* requires *Country Energy Gas* to provide information on matters including volume forecasts and customer numbers.

The forecasts of operating costs, capital costs and projected revenues set out in this *Access Arrangement Information* are based upon the demand forecasts from the *IPART* final decision.

6.1 Overview of Gas Demand in Wagga Wagga

The Wagga Wagga system serves over 18,000 customers who purchase a total of approximately 1.4 PJ of gas each year, which is transported through 622km of pipes/mains. The vast majority of the gas consumers are *Volume Customers*, each using less than 10 TJ of gas per year. The domestic market represents approximately 49% of the total load, and about 260 Volume based commercial and industrial customers consume approximately 8%.

There are also a small number (currently 14) of *Contract Customers*, who consume the remaining 43% of the total load. These customers are concentrated in three zones:

- the Bomen zone, covering all the area serviced by the network that is north of the Murrumbidgee River;
- the Central zone, covering the main area of the City of Wagga Wagga;
- the Fringe zone, covering customers located on the extensions of the network to the Kapooka and Forest Hills areas.

The Bomen zone is closest to the northern city gate, and historically, customers in the Bomen zone have been most susceptible to bypass.

Around 80 percent of domestic households are connected to the *Network*. Similar to other regional centres, commercial uses of gas include wool combing, hospital services, plywood manufacture and asphalt production. Gas is also used by large army and air force establishments, and by Charles Sturt University.

6.2 Forecast

The load forecast for the *Network* is summarised below in Table 6.1.

Table 6.1 – Total Forecast Load

	2005/06	2006/07	2007/08	2008/09	2009/10
Volume load forecasts					
Customers (No)	18,052	18,252	18,441	18,650	18,890
<i>Total volume load (GJ)</i>	<i>802,474</i>	<i>808,801</i>	<i>815,317</i>	<i>821,202</i>	<i>829,105</i>
Contract load forecasts					
Bomen Zone load (GJ)	426,612	426,424	426,236	426,047	425,859
Central Zone load (GJ)	49,511	49,457	49,404	49,351	49,297
Fringe Zone load (GJ)	133,609	133,381	133,154	132,925	132,698
<i>Total contract load (GJ)</i>	<i>609,732</i>	<i>609,262</i>	<i>608,794</i>	<i>608,323</i>	<i>607,854</i>
Total load (GJ)	1,412,206	1,418,063	1,424,111	1,429,525	1,436,959
Contract MDQ					
Bomen Zone MDQ (GJ)	2,245	2,245	2,245	2,245	2,245
Central Zone MDQ (GJ)	273	273	273	273	273
Fringe Zone MDQ (GJ)	786	786	786	786	786

7. TOTAL REVENUE REQUIREMENT AND X FACTORS

7.1 Total revenue requirement

Table 7.1 brings together the elements of the total revenue requirement as set out in the previous sections.

Table 7.1 – Total Revenue Requirement (\$'000, nominal)

	Jan to Jun 2006	2006/07	2007/08	2008/09	2009/10
Depreciation	551	1,160	1,263	1,372	1,488
Return on Capital	1,446	2,987	3,089	3,195	3,308
Return on Working Capital	49	99	101	104	106
Non-capital costs	1,111	2,274	2,326	2,380	2,438
Total costs	3,157	6,520	6,779	7,051	7,340

7.2 X Factors

Country Energy Gas has adopted the X Factors and price path proposed by *IPART* in their final decision and shown in the table below.

Table 7.2 - Real Price Adjustments

	Jan to Jun 2006	2006/07	2007/08	2008/09	2009/10
Po	2.9%				
X Factor		0%	0%	0%	0%

In order to allow the X factor adjustments to be met, *Country Energy Gas* does not propose that side-constraints apply to tariffs.

8. REFERENCE TARIFFS AND REFERENCE TARIFF POLICY

8.1 Calculation of Reference Tariffs

8.1.1 Allocation of Total Revenue Requirement to Services

In order to provide information on the cost of providing services to various customer classes, and to enable tariff levels to be determined, *Country Energy Gas* engaged IRS to undertake a cost of supply analysis for the *Network*. The approach adopted in the analysis was as follows:

- All asset related costs and all operating expenses were identified, including corporate overheads (in aggregate these costs equalled the total revenue requirement.)
- The function that each cost is incurred to perform was determined. These functions generally relate to the services provided by the business, for example metering, high pressure mains and low pressure mains. These functions were chosen to assist in the cost allocation across rate classes. For example, transmission and distribution functions were separately identified to ensure distribution mains costs were not assigned to transmission customers. Where some costs are incurred to perform more than one function, additional analysis was undertaken to determine the extent to which a cost can be attributed to each function.
- The costs were classified according to the drivers which cause the functionalised costs to vary. Some costs vary by system throughput, some are driven by the number of customers, and others are driven by the level of peak demand. For example, billing costs are largely driven by customer numbers; transmission costs may be driven by a combination of a need to meet annual throughput and also to meet peak demand. Some costs, for example high pressure mains, vary through a combination of drivers, and some analysis and judgement was required to ascertain the extent to which each driver causes variability in the relevant cost. This classification process also allowed *Country Energy Gas* to determine the extent to which fixed costs were recovered through fixed charges, demand-related costs were recovered through demand charges and volume-based costs were recovered through volumetric charges.
- Costs were then distributed to the various customer classes (and even particular customers) based on the extent to which those customers impact the system. For example, the billing function tends to vary by the number of customers, so the largest customer class (Volume domestic) bore the majority of those costs.

This process allowed the costs associated with providing each service to be determined according to the cost of providing each component of the service. For example, this process ensured that Contract (high pressure) customers did not bear costs associated with the low pressure system, but that Volume (low pressure) customers carried a fair share of the costs associated with their use of the high pressure system supplying the low pressure system.

This process also enabled the costs assigned to each customer class to be identified, and for *Country Energy Gas* to identify if current revenue levels are consistent with costs.

Costs have been allocated between *Country Energy Gas*' regulated Wagga Wagga gas distribution network and *Country Energy Gas*' unregulated gas distribution networks based on each network's share of budgeted direct total costs as a proportion of the total direct costs for all gas distribution networks.

Country Energy Gas has completed a cost of supply model based on the building blocks calculated as part of *IPART*'s final decision. The table below compares the costs allocated to each reference tariff class to the revenue received from each class. Revenue recovered from contract customers in the table 8.1 does not include revenue from metering for those customers. Metering revenues from contract customers are set to recover metering costs for those customers. As can be seen from the table, each reference tariff class differs slightly in terms of cost reflectivity in the first year of the next access arrangement period from 1 January 2006 to 30 June 2010.

Table 8.1 - Comparison of allocated costs to revenue recovered for half year ended 30 June 2006

	Revenue Recovered	Allocated Costs
Volume Domestic	2,631,871	2,785,118
Volume Commercial	152,279	94,720
Volume Industrial	84,961	44,811
Bomen Contract Customers	88,319	88,817
Central Contract Customers	29,703	18,585
Fringe Contract Customers	182,544	124,545

Country Energy Gas proposes to transition each customer class to cost reflective levels throughout the future regulatory period, so that by the 2009-10 financial year all customer classes will be at cost reflective levels. The transitioning process will involve several steps, depending on the cost recovery starting point for each customer class. The proposed reference tariff price paths are designed to minimise price volatility between years, while ensuring that cost reflective levels are achieved for all reference tariff classes by the end of the regulatory period.

8.1.2 Reference Tariff Structure

The structure of the *Reference Tariffs for Transportation Services* remains fundamentally unchanged from the *First Access Arrangement Period*.

The tariff for the *Volume Transportation Service* comprises a *Monthly Fixed Charge* based on the flow rate of the *Metering Facilities*, plus a *Volumetric Charge* based on actual gas deliveries.

The tariff for the *Contract Transportation Service* comprises a *Monthly Capacity Charge* (based on *MDQ*), plus a *Monthly Metering Charge* designed to recover the specific costs associated with meter provision, meter reading and data handling and provision.

8.1.3 Overruns

The *Access Arrangement* proposes a new arrangement for charging for *Overruns*.

Under the relatively complex formula that applied in the *First Access Arrangement*, each *Overrun* effectively required a higher capacity payment to be paid, with the magnitude of the payment increasing (due to being based on the highest *Overrun* amount recorded) if an *Overrun* occurred more than three times in a month or 10 times in a year.

Country Energy Gas proposes to change this approach to an arrangement where:

- *Users* may apply to have *Overruns* authorised (provided that no more than five authorisations have already been granted in that *Year*) in which case no additional charge will apply; and
- where more than three unauthorised *Overruns* occur in a month, the *MDQ* will be reset consistent with the highest unauthorised *Overrun* in that month, and hence higher *Capacity Charges* will apply going forward.

Country Energy Gas believes the new approach is preferable, in that it:

- recognises that single or small *Overrun* events are unlikely to impose additional costs on the system in the short run, and hence there is limited justification for applying higher charges;
- but that repeated *Overruns* indicate that system capacity and security is reduced and hence that additional costs are likely to be incurred in the medium term; and
- is much simpler, easier to understand and easier to administer than the previous formula-based approach.

8.1.4 Unaccounted for Gas

Existing arrangements for the provision of *Unaccounted for Gas* will continue. That is, *Country Energy Gas* has added a defined percentage to the volume of gas withdrawn from Delivery Points in order to calculate the volume of gas upon which tariffs will be set. This percentage reflects *Unaccounted for Gas* in the *Network*, and has been reflected in the approved demand forecasts contained in *IPART's* final decision.

This approach provides *Country Energy Gas* with the incentive to reduce the level of *Unaccounted for Gas* in the *Network*

8.2 Reference Tariff Policy

8.2.1 Form of Price Control

The *Access Arrangement* proposes that *Reference Tariffs* be adjusted in accordance with a tariff basket approach. Under this approach

- individual tariffs and tariff components can move consistent with a cap which defines the overall movement in average prices;

- average prices are determined by multiplying tariff components by relevant volumes incurred in the previous year;
- distribution businesses take the risk associated with higher or lower gas usage.

The tariff basket approach has been adopted in the gas and electricity industry in other jurisdictions (notably Victoria) and has been proposed by *IPART* for application in the NSW electricity industry.

8.2.2 Pass-Throughs

Section 3.4 of the *Access Arrangement* permits material changes in certain cost items which are beyond *Country Energy Gas*' control and influence to be passed through to customers. These include changes to:

- taxes, including new taxes or amendments to existing taxes;
- regulatory arrangements such as changes in occupational health and safety provisions, changes to regulatory instruments, changes to reticulator's authorisation fees;
- market-events, such as those related to full retail competition and retailer of last resort arrangements; and
- mandated changes in services.

Pass-through mechanisms are particularly important in respect of the *Network* due to its small size and the reduced opportunity to absorb cost increases simply by accepting a reduction in the return on capital compared to other larger networks.

The proposed approach is consistent with sound risk management principles and similar provisions are a feature of other access arrangements. However, customers' interests are protected to the maximum extent possible, in that:

- *IPART* must approve any tariff change and can appoint an auditor to review the effects of the costs;
- the provision is symmetric and *IPART* is able to initiate a change in tariffs should *Pass-Through Items* reduce or be removed; and
- unless prescribed otherwise by law, tariffs must be adjusted consistent with the basis upon which *Reference Tariffs* were originally determined. This ensures that individual customers or customer groups do not inappropriately bear the burden of price changes.

To minimise costs and ensure that *Users* do not have to deal with more than one price change each year, *Country Energy Gas* proposes that changes to tariffs as a result of the *Pass Through Event* occur at the same time as the annual price changes.

8.2.3 Addition and Deletion of Tariffs

Section 3.6 of the *Access Arrangement* enables *Country Energy Gas* to add or delete tariffs during the *Access Arrangement Period*. *Country Energy Gas* does not have any plans to amend its tariff structure at this time. Nevertheless, such flexibility will enable it to respond in the event that cost structures or demand change throughout the *Access Arrangement Period*. The bulk of the provisions in this section clarify the

manner in which the tariff basket price control will be complied with in the event that tariffs are added or deleted.

9. TERMS AND CONDITIONS

Section 3.8 of the *Code* requires that an *Access Arrangement* describe the 'terms and conditions' upon which the *Reference Service* will be made available, and that these terms and conditions be 'reasonable' in the regulator's opinion.

Since the commencement of the *First Access Arrangement* on 1 October 1999, a number of additional compliance and other regulatory obligations have been imposed on NSW gas distribution businesses. These include obligations imposed by *IPART* and the NSW Government pursuant to the *Gas Act* and the licensing regime, and cover matters such as:

- the introduction of full retail competition;
- the introduction of the Gas Supply (Natural Gas Retail Competition) Regulation 2001;
- the introduction of the *Network Code* for full retail competition on 20 December 2001; and
- the establishment of the *Gas Retail Market Business Rules* on 23 May 2003.

In defining the terms and conditions upon which services will be offered, *Country Energy Gas* has reflected the requirements of these documents.

Documentation has also been issued in respect of the NSW electricity industry. Where possible, *Country Energy Gas* has attempted to ensure consistency with relevant provisions in both industries. Where relevant provisions do not exist and terms and conditions are left to *Country Energy Gas* to determine, *Country Energy Gas* has attempted to ensure consistency between the provisions in the *Access Arrangement* and standard *Reference Service Agreement* and the electricity Market Operation Rule (Network Use of System Agreements) No. 2 of 2001. This approach is in the interests of both *Country Energy Gas* and *Users* and *Prospective Users* in that it reflects existing arrangements with which both are familiar (most *Users* and *Prospective Users* operate in both industries), and allows *Country Energy Gas* to minimise the costs of its internal systems.

Country Energy Gas' approach to defining the terms and conditions are consistent with good industry practice and are 'reasonable' in that they:

- are sufficiently well defined, so that the likelihood of a dispute over the terms and conditions of access is minimised; and
- are designed to protect the legitimate business interests of *Country Energy Gas* as well as *Users* and *Prospective Users*.

To ensure consistency and avoid duplication, the *Reference Service Agreement* applies to both the *Transportation Reference Services* and the *Additional Reference Services*. However, a number of clauses – for example clauses 4 to 10 – are only relevant to *Transportation Reference Services*.

10. OTHER MATTERS

10.1 Revisions Submissions and Commencement Date

Country Energy Gas has proposed an *Access Arrangement Period* of 4.5 years and a *Revisions Submission Date* of 1 July 2009.

Country Energy Gas has sought a 4.5 year *Access Arrangement Period* in order to place the *Access Arrangement* on a financial year basis rather than calendar year at present. The move to a financial year is consistent with most regulatory periods in other States and *Country Energy Gas* notes that *IPART* has a preference to move onto a financial year basis.

10.2 Capacity Management Policy

Consistent with existing arrangements in NSW, section 5.1 of the *Access Arrangement* provides that the *Network* will continue to be a *Contract Carriage Pipeline*.

10.3 Queuing Policy

Recent amendments to the *Code* mean that distribution pipelines are no longer required to (although they may) include a formal *Queuing Policy*. Further, the level of *Spare Capacity* on the *Network* meant that no queues formed during the *First Access Arrangement Period* and it is extremely unlikely that a queue will form during the forthcoming *Access Arrangement Period*. *Country Energy Gas* has therefore not included a formal *Queuing Policy* in the *Access Arrangement*.

10.4 Extensions/Expansions Policy

Section 7 of the *Access Arrangement* sets out the *Extensions and Expansions Policy* for the *Network*. It identifies the circumstances under which any extensions to or expansions of the *Network* will be covered and the tariff arrangements to apply to any extension or expansion.

In the *Access Arrangement*, references to extensions or expansions are references to extensions or expansions to the *Network* as it will exist on 1 January 2006. In general, most extensions and expansions to the *Network* will be covered and prevailing *Reference Tariffs* will apply.

The *Extensions and Expansions Policy* also contains provisions relating to the extension of the *Network* into *New Developments*. Consistent with proposals to open up extensions of the *Network* and connection of customers to competition, amongst other things the policy provides the ability for *Developers* to arrange for the construction of *New Facilities* themselves (subject to compliance with relevant Laws and/or documentation issued by *Country Energy Gas*, and to paying for appropriate supervision and commissioning of facilities).

This approach is generally consistent with that adopted in the electricity industry in Wagga Wagga, where developers are required to construct or pay for new facilities to

serve customers. It will allow *New Facilities* to be provided on the most efficient basis and will thus lead to lower tariffs for all customers over the longer term. *New Facilities* that are constructed or funded by *Developers* will enter the *Capital Base* at zero value.

11. KEY PERFORMANCE INDICATORS

The KPIs for Country Energy Gas' Wagga Wagga distribution network are set out in Table 11.1 below.

Table 11.1 – Wagga Wagga Distribution Network KPIs (real 2005/06)

	Jan to Jun 2006	06/07	07/08	08/09	09/10
Non-capital costs/customer	\$123.10	\$121.43	\$119.97	\$118.41	\$116.85
Non-capital costs/metre	\$ 3.57	\$ 3.53	\$ 3.49	\$ 3.46	\$ 3.43