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10 June 2005

Dr Michael Keating AC
Chairman
Independent Pricing and Regulatory Tribunal
PO Box Q290
QVB Post Office NSW 1230

Dear Dr Keating

Revisions to AGLGN's Access Arrangement and Access Arrangement Information

Please find attached a revised:

- Access Arrangement;
- Access Arrangement Information;
- Addendum to the Access Arrangement, showing GST exclusive prices in 2004/05 Dollars;
- Addendum to the Access Arrangement, showing GST exclusive prices in 2005/06 Dollars.

Yours sincerely,

David Pringle
Manager Regulatory Affairs, Gas Networks

For and on behalf of AGL Gas Networks Limited

AGL GAS NETWORKS

Access Arrangement for NSW Network

June 2005

AGL Gas Networks Limited
ACN 003 004 322
ABN 87 003 004 322

AGLGN ACCESS ARRANGEMENT

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AGL GAS NETWORKS LIMITED

ACCESS ARRANGEMENT

1 INTRODUCTION

Access Arrangement

AGL Gas Networks Limited ("AGLGN") established its 1997 Access Undertaking pursuant to the NSW third party access laws, as they existed at that time, under the Gas Supply Act 1996 (NSW).

On 23 December 2003 AGLGN submitted revisions to the 2000 Access Arrangement. This Access Arrangement has been formulated to the National Third Party Access Code for National Gas Pipeline Systems (**the National Code**). The Independent Pricing and Regulatory Tribunal issued a Final Decision on the proposed Access Arrangement on 29 April 2005.

This Access Arrangement incorporates amendments to the AGLGN proposed Access Arrangement required by the Final Decision.

Structure of this Access Arrangement

This Access Arrangement is set out as follows:

Section 1	**Introduction** sets out an overview of this Access Arrangement including its structure, commencement date and revisions date.
Section 2	**Services Policy** describes the Services offered under this Access Arrangement and the procedure to obtain access to the Services.
Section 3	**Reference Tariffs** describes the Reference Tariffs applicable to the Reference Services.
Section 4	**Reference Tariff Policy** describes the principles used to determine the Reference Tariffs, and additional matters regarding New Facilities Investment, Capital Redundancy and Incentive Mechanisms.
Section 5	**Trading Policy** which allows for Bare Transfer, Substituted Transfer and change of Delivery and Receipt Points.
Section 6	**Queuing Policy** describes the order in which capacity will be allocated to Prospective Users where there is insufficient capacity on a transportation route to satisfy all Requests for Service on that route.
Section 7	**Extensions/Expansions Policy** describes the manner in which extensions or expansions to the Network and New Facilities Investment will be dealt with under this Access Arrangement.

Section 8	**Capacity Management Policy** specifies that the Network is a contract carriage pipeline rather than a market carriage pipeline for the purposes of the National Code.
Section 9	**Asset Register, Capital Contribution Data Base and UAG Audit** sets out details of AGLGN's asset register, capital contribution data base and UAG audit report.
Schedule 1	Definitions and Interpretation
Schedule 2	General Terms and Conditions applying to Reference Services
Schedule 2.A	All Reference Services
Schedule 2.B	Reference Services except Tariff Reference Service
Schedule 3	Gas Balancing
Schedule 4	Operational Principles
Schedule 5	Gas Quality Specification
Schedule 6	Request for Service
Schedule 6.B	Request for Service Form
Schedule 7	Sydney, Newcastle and Wollongong Local Network Price Zones, and Postcodes to which Trunk Exit Zones apply
Schedule 8	Receipt Point Pressures

Supporting information is provided in the Access Arrangement Information that has been submitted as a separate document.

Commencement of this Access Arrangement

This Access Arrangement commences on 1 July 2005, being the date on which the approval of the Relevant Regulator takes effect under Section 2 of the National Code.

Revisions of this Access Arrangement

AGLGN will submit revisions to this Access Arrangement on or before 30 June 2009 ("**Revisions Submissions Date**").

The revisions to this Access Arrangement will commence on the latter of 1 July 2010 and the date on which the approval by the Relevant Regulator of the revisions to the Access Arrangement takes effect under the National Code ("**Revisions Commencement Date**").

2 SERVICES POLICY

Introduction

AGLGN offers the following Services:

i. Seven Reference Services;
ii. Interconnection of Embedded Networks Service; and
iii. Negotiated Services.

Reference Services

The seven Reference Services are:

i.	Capacity Reservation Service	–	Section 2.1
ii.	Managed Capacity Service	–	Section 2.2
iii.	Throughput Service	–	Section 2.3
iv.	Multiple Delivery Point Service	–	Section 2.4
v.	Tariff Service	–	Section 2.5
vi.	Meter Data Service	–	Section 2.6
vii.	Gas Swap Service	–	Section 2.7

Non Reference Services

i.	Interconnection of Embedded Network Services	–	Section 2.8
ii.	Negotiated Services	–	Section 2.9

Availability of Reference Services

The seven Reference Services are offered separately on each of the Local Network and the Trunk (except for the Meter Data Service which is available only with the Local Network Reference Service and the Gas Swap Service which is available only to Users of Trunk non- tariff Reference Services).

The Reference Services are available to Users to transport gas, obtain Meter Data Services or obtain Gas Swap Services if the following criteria are satisfied:

- All Local Network Reference Services – to Delivery Points existing on the Network where Reference Services are provided at the date this Access Arrangement takes effect;
- Capacity Reservation Service, Managed Capacity Service, and Throughput Service on the Local Network— to new Delivery Points served from facilities where the maximum allowable operating pressure is less than or equal to 1,050 kPa and where the MDQ is no less than ten times the MHQ;
- Local Network Tariff Service – to new Delivery Points served from facilities where the maximum allowable operating pressure is less than or equal to 500kPa;
- Meter Data Service – to any Delivery Point for which the User has a Local Network Reference Service. AGL may cease to offer this service as a Reference Service if Meter Data Services become contestable;

- Trunk Reference Services – Reference Service corresponding to each of the Reference Services (other than a Meter Data Service) described in relation to the Local Network is offered from a Trunk Receipt Point to a Local Network Receipt Point. These Reference Services can be taken either as a forward haul or back haul from any Trunk Receipt Point to any Trunk Exit Zone. In the Wilton-Newcastle and Wilton-Wollongong Network Sections, every Local Network Reference Service (other than a Meter Data Service) must have a corresponding Trunk Reference Service. This requirement does not apply to Local Network Reference Services in the Wilton-Wollongong Network Section where Users are served by the Local Network Receipt Point established at Port Kembla with the Eastern Gas Pipeline; and

- Gas Swap Services – to any User of Trunk non-tariff Reference Services on the Wilton- Newcastle Network Section.

Requests for Services

The procedures to be followed by a User seeking to obtain a Reference Service, Interconnection of Embedded Network Service, or Negotiated Service are set out in Schedule 6.

An offer made in response to a Request is subject to the Queuing Policy as set out in Section 6.

Service Agreements

All Users of a Service will be required to enter into a Service Agreement specific to that User and that Service.

REFERENCE SERVICES

2.1 Capacity Reservation Service

2.1.1. Local Network Capacity Reservation Service

General

A Local Network Capacity Reservation Service is a service for the transportation of gas by AGLGN from the Local Network Receipt Point through the Local Network to a single Non-Tariff Delivery Point, including options for Summer Tranche Capacity and Short-Term Capacity, with Charges determined on the basis of capacity reservation ($ per GJ of MDQ) and Charges payable for Overruns.

Section 2.1.1 contains the terms and conditions applicable to a Local Network Capacity Reservation Service and lists the applicable Reference Tariffs. These terms and conditions are in addition to:

(a) the general terms and conditions in Schedule 2A and Schedule 2B;

(b) the gas balancing arrangements in Schedule 3; and

(c) the operational principles in Schedule 4.

Terms and Conditions

Availability

- The Local Network Capacity Reservation Service is available to any single Delivery Point where a Customer is reasonably expected to withdraw a quantity of gas exceeding 10TJ per Contract Year.
- Subject to the following, in the Wilton-Newcastle and Wilton-Wollongong Network Sections, the Local Network Capacity Reservation Service can only be taken in conjunction with a corresponding Trunk Capacity Reservation Service.
- The requirement to have a corresponding Trunk Capacity Reservation Service does not apply to Local Network Capacity Reservation Services in the Wilton-Wollongong Network Section where Users are served by the Local Network Receipt Point at Port Kembla established with the Eastern Gas Pipeline.
- The Local Network Capacity Reservation Service is only available where all Services to the Delivery Point are Local Network Capacity Reservation Services.

Delivery Point / Receipt Point

The Local Network Receipt Point for each Delivery Point will be determined in accordance with the Table in Section 3.3 and/or Schedule 7, except for the Wilton-Wollongong Network Section where Users must nominate either the Local Network Receipt Point at Wollongong established with the Wilton-Wollongong Trunk Section or the Local Network Receipt Point at Port Kembla established with the Eastern Gas Pipeline.

MDQ and MHQ

- Users will be required to specify a level of MHQ and MDQ for each Contract Year which fairly reflects the maximum Hourly and Daily requirements at the Delivery Point, based on prior consumption where that information is available.

- AGLGN's obligation to deliver gas to the Delivery Point is limited to the MHQ in any Hour and MDQ on any Day (plus Authorised Overruns).

- Where:

    - new equipment is commissioned at a new or existing Delivery Point; or
    - daily metering has not been installed at a Delivery Point at the commencement of a Service Agreement,

    the User may increase the MDQ specified in the Service Agreement once. An increase to the MDQ must be made within three months of the later of the commencement date of the Service Agreement and the date on which daily metering data became available. An increase will be subject to the Queuing Policy. An increase in MDQ will be deemed to take effect from the commencement date of the Service Agreement.

- At other times during the Term of the Service, the User may increase the MDQ and/or MHQ by effecting Additional Capacity, Short-Term Capacity and/or Summer Tranche Capacity in accordance with the terms and conditions pertaining to such requests.

Overruns

- An Overrun will occur if withdrawals at the Delivery Point exceed the MHQ in any Hour or the MDQ on any Day. Overruns may be authorised or unauthorised.

- A charge will be payable in respect of an Overrun on MDQ.

Metering

- Basic Metering Equipment will be provided in accordance with the conditions in Schedule 2A.

- Where AGLGN offers a Meter Data Service as a Reference Service, the Local Network Capacity Reservation Service must be taken in conjunction with the Meter Data Service.

Term

The term of the Service will be a minimum of one year and a maximum of two years from the commencement of the Service to the Delivery Point, as specified by the User at the time of entering into the Service Agreement.

Summer Tranche Capacity

- A User may increase the MDQ for periods of one or more whole months between 1 October and 30 April inclusive during the term of the Service Agreement, commencing on the first day of any such month ("**Summer Tranche Capacity**").

- The User must request Summer Tranche Capacity in accordance with Schedule 6 and availability of the capacity will be subject to the Queuing Policy.

- AGLGN will respond to any request for Summer Tranche Capacity within 10 Business Days of the date of receipt of a completed Request for Service under Schedule 6.

Short-Term Capacity

Short-Term Capacity is an increase in the MDQ for a minimum of 1 week and a maximum of 4 weeks in weekly increments ("**Short-Term Capacity**").

Short-Term Capacity for Users supplying Customers below 30TJ per annum at a Delivery Point

Users supplying a Customer at a single Delivery Point which is reasonably expected to withdraw 30TJ or less per Contract Year may obtain Short-Term Capacity for such Delivery Point on the terms set out below:

- The Customer at that Delivery Point must use gas primarily for production of goods (this option is not available where the Customer uses gas primarily for space heating).

- Where the Customer is at an existing Delivery Point at 31 December 2003[1], a User may only request Short-Term Capacity in respect of that Customer where the MDQ reservation is not less than 95 per cent of the MDQ reservation in the transportation service agreement prior to 31 December 2003.

- In all other cases, a User may only request Short-Term Capacity in respect of that Customer where the MDQ reservation in any year of the Access Arrangement which is not the first Contract Year under a Capacity Reservation Service is not less than 95 per cent of the MDQ reservation in the first Contract Year of the Capacity Reservation Service.

- There must be a minimum separation of 30 days between the end of a Short-Term Capacity period and the commencement of the next Short-Term Capacity period.

- Short-Term Capacity must not exceed 8 weeks in any 12 month period.

- The User must request Short-Term Capacity in accordance with Schedule 6 and the availability of the Short-Term Capacity will be subject to the Queuing Policy.

[1] That is, it is a Delivery Point which is supplied under a transportation service or negotiated service under the Access Arrangement 2000 for supply of gas at the date of the revisions submission date as set out in the Access Arrangement dated September 2000, as amended by the Relevant Regulator.

Where there is a queue for available capacity, requests for Short-Term Capacity have lowest priority.

- Users must provide evidence of a one-off production requirement. A signed statement from the Customer is sufficient.

- A Request for a Short-Term Capacity booking can be made no more than 1 month in advance of the proposed commencement date.

- AGLGN will respond to a Request for Short-Term Capacity within 5 Business Days except where a Request involves an increase in the MHQ such that the total MHQ requirement would exceed the capacity of the metering facilities. In the latter case the normal Request for Service process and timeframes will apply.

- A Short-Term Capacity Charge (premium) will be payable.

- Notwithstanding that a Request for Short-Term Capacity is accepted, the User will be liable for and indemnify AGLGN against all losses, liabilities and expenses incurred as a result of the User exceeding the MDQ applicable at the time it utilised the capacity unless the capacity was taken at that time as an Authorised Overrun.

Short-Term Capacity for Users Supplying Customers above 30TJ per annum at a Delivery Point

Users supplying a Customer at a single Delivery Point which is reasonably expected to withdraw an amount in excess of 30TJ per Contract Year may obtain Short-Term Capacity for such Delivery Points on the terms set out below:

- A User may increase the MDQ to cover the Customer's reasonable requirements during periods of equipment failure, commissioning or additional production following equipment failure, and events such as the re-firing of furnaces after re-builds or at start-ups after non-scheduled plant maintenance and such other exceptional physical circumstances beyond the reasonable control of a Customer, where such activity occurs less frequently than once every year.

- Short-Term Capacity is available, subject to AGLGN being reasonably satisfied that the increased MDQ is required to meet the criteria above.

- The User must request Short-Term Capacity in accordance with Schedule 6 and the availability of the Short-Term Capacity will be subject to the Queuing Policy in Section 6. Any Request for Short-Term Capacity must be accompanied by a signed statement from the Customer outlining the reasons for the request.

- Request for Short-Term Capacity may be made in advance or at any time within one month after the capacity or any part of it has been used by the User.

- Where a Request for Short-Term Capacity is accepted after the capacity or any part of it has been used by the User, a charge will be payable by the User in respect of an Overrun on the quantity of gas in excess of the MDQ and Short-Term Capacity used at the Delivery Point.

- Notwithstanding that a Request for Short-Term Capacity is accepted, the User will be liable for and indemnify AGLGN against all losses, liabilities and expenses incurred as a result of the User exceeding the MDQ applicable at the time it

utilised the capacity unless the capacity was taken at that time as an Authorised Overrun.

Additional Capacity

Additional Capacity is an increase in the MDQ other than a Summer Tranche Capacity or Short-Term Capacity for a minimum of one year ("**Additional Capacity**"). Additional Capacity forms part of the Capacity Reservation Service and is provided under the same Service Agreement.

Where a Delivery Point is served under a Local Network Capacity Reservation Service Agreement, Additional Capacity for that Delivery Point during the term of the existing Service Agreement must:

- relate to a Local Network Capacity Reservation Service;
- have a term of at least one year; and
- have either the same commencement date or the same termination date as the existing tranche of capacity under the Service Agreement (excluding any Summer Tranche Capacity or Short-Term Capacity).

A Request for Additional Capacity may be made in advance or at any time up to the first Business Day of the month after the first month in which the Additional Capacity or part of it is used by the User.

If the Term for the Local Network Capacity Reservation Service for the Delivery Point is less than two Contract Years, that Term may be extended to no more than two Contract Years, calculated from the commencement date of the Local Network Capacity Reservation Service so that the expiry date for the Local Network Capacity Reservation Service is the same as the expiry date for the Additional Capacity requested.

Where a Request for Additional Capacity is accepted after the Additional Capacity or part of it has been used by the User:

- the Request will be deemed to take effect from the first day of the month during which the Additional Capacity or part of it is first used (the "**Retrospective Date**");
- the Charge for MDQ will be payable by the User from the commencement date of the Additional Capacity, notwithstanding that it may be earlier than the Retrospective Date;
- a charge will be payable by the User in respect of an Overrun incurred as a result of the User exceeding:

  i. the MDQ (excluding the Additional Capacity requested) prior to the Retrospective Date; and

  ii. the MDQ (including the Additional Capacity requested) on or after the Retrospective Date.

- Except as provided above, a charge will be payable by the User in respect an Overrun on the quantity of Gas in excess of the MDQ (excluding the Additional Capacity Requested), up until the later of the date AGLGN agrees to the Request and the date of commencement of the Additional Capacity.
- Notwithstanding that a Request for Additional Capacity is accepted, the User will be liable for and indemnify AGLGN against all losses, liabilities or expenses

incurred as a result of the User exceeding the MDQ applicable at the time it utilised the Additional Capacity, unless the Additional Capacity was taken at that time as an Authorised Overrun.

Charges

There are five categories of Charges for a Local Network Capacity Reservation Service all of which are specified in Section 3:

(a)	General charges:			
	(i)	Charge for MDQ	–	Section 3.1.1
	(ii)	Provision of Basic Metering Equipment	–	Section 3.1.2
(b)	Overrun Charges		–	Section 3.13
(c)	Gas Balancing Charges		–	Section 3.14
(d)	Charges for Ancillary Services		–	Section 3.15
(e)	Short-Term Capacity Charge		–	Section 3.1.3

2.1.2. Trunk Capacity Reservation Service

General

A Trunk Capacity Reservation Service is a service for the transportation of gas by AGLGN through the Trunk from the Trunk Receipt Point to the Trunk Exit Zone for the Nominated Delivery Point.

Section 2.1.2 contains the terms and conditions applicable to a Trunk Capacity Reservation Service and lists the applicable Reference Tariffs. These terms and conditions are in addition to:

(a) the general terms and conditions in Schedule 2A and Schedule 2B;

(b) the gas balancing arrangements in Schedule 3; and

(c) the operational principles in Schedule 4.

Terms and Conditions

Availability

- The Trunk Capacity Reservation Service is available as forward haul or back haul from any Trunk Receipt Point to any Trunk Exit Zone.
- The Trunk Capacity Reservation Service is only available in conjunction with a corresponding Local Network Capacity Reservation Service.

Nominated Delivery Point

- Users will be required to specify the Nominated Delivery Point in respect of which the Trunk Capacity Reservation Service is taken.
- The quantity of gas withdrawn at the Nominated Delivery Point will be deemed to be the quantity of gas withdrawn by the User at the Trunk Exit Zone.
- The User must specify a single Receipt Point for the Nominated Delivery Point.
- The Trunk Exit Zone for the Nominated Delivery Point is referenced in Section 3.3.

MDQ and MHQ

- The MHQ and MDQ specified in the Corresponding Local Network Service will apply, including where the MDQ is increased as the result of commissioning of new equipment or installation of daily metering.
- AGLGN's maximum obligation to deliver gas to the Trunk Exit Zone is MHQ in any Hour and MDQ on any Day (plus Authorised Overruns).

Overruns

- An Overrun will be deemed to have occurred if withdrawals at the Nominated Delivery Point exceed the MHQ in any Hour or the MDQ on any Day for that Delivery Point. Overruns may be authorised or unauthorised, and an Authorised Overrun at the Nominated Delivery Point will be deemed to be an Authorised Overrun for the purposes of the Trunk Service.

- A charge will be payable in respect of an Overrun on MDQ calculated on the overrun quantity at the Nominated Delivery Point.

Term

The term of the Service will be the term of the Corresponding Local Network Service.

Summer Tranche Capacity, Short-Term Capacity and Additional Capacity

Where the User takes Summer Tranche Capacity, Short-Term Capacity or Additional Capacity under the Corresponding Local Network Service, the MDQ under the Trunk Capacity Reservation Service Agreement will be amended accordingly.

Charges

There are four categories of Charges for a Trunk Capacity Reservation Service each of which are specified in Section 3:

(a)	Charge for MDQ	-	Section 3.3
(b)	Overrun Charges	-	Section 3.13
(c)	Short-Term Capacity Charge	-	Section 3.3.2
(d)	Gas Balancing Charges	-	Section 3.14

2.2 Managed Capacity Services

2.2.1. Local Network Managed Capacity Service

General

A Local Network Managed Capacity Service is a service for the transportation of gas by AGLGN from a Local Network Receipt Point through the Local Network to a single Non-Tariff Delivery Point with charges determined on the basis of capacity reservation ($ per GJ per MDQ) and no charges payable for Overruns. The MDQ must usually be equal to or greater than the maximum quantity of gas withdrawn at the Delivery Point on any Day in the previous 12 months.

Section 2.2.1 contains the terms and conditions applicable to a Local Network Managed Capacity Service and lists the applicable Reference Tariffs. These terms and conditions are in addition to:

(a) the general terms and conditions in Schedule 2A and Schedule 2B;

(b) the gas balancing arrangements in Schedule 3; and

(c) the operational principles in Schedule 4.

Terms and Conditions

Availability

- The Local Network Managed Capacity Service is available to any single Delivery Point where a Customer is reasonably expected to withdraw a quantity of gas exceeding 10TJ per Contract Year.
- Subject to the following, in the Wilton-Newcastle and Wilton-Wollongong Network Section, the Local Network Managed Capacity Service can only be taken in conjunction with a corresponding Trunk Managed Capacity Service.
- The requirement to have a corresponding Trunk Managed Capacity Service does not apply to Local Network Managed Capacity Services in the Wilton-Wollongong Network Section where Users are served by the Local Network Receipt Point at Port Kembla established with the Eastern Gas Pipeline.
- The Local Network Managed Capacity Service is only available where the Delivery Point has had daily metering information available for Measuring Equipment at all Delivery Stations at the Delivery Point for a period of more than 14 months prior to the commencement date of the Local Network Managed Capacity Service.
- The Local Network Managed Capacity Service is only available where all Services to the Delivery Point are Local Network Managed Capacity Services.

Delivery Point / Receipt Point

- The Local Network Receipt Point for each Delivery Point will be determined in accordance with the Table in Section 3.3 and/or Schedule 7, except for the Wilton-Wollongong Network Section where Users must nominate either the Local

Network Receipt Point at Wollongong established with the Wilton-Wollongong Trunk Section or the Local Network Receipt Point at Port Kembla established with the Eastern Gas Pipeline.

MDQ and MHQ

- Users will be required to establish a level of MHQ which reflects the maximum Hourly requirement at the Delivery Point, based on prior consumption where that information is available.
- Users will be required to specify a level of MDQ which reflects the maximum Daily requirement at the Delivery Point and is equal to or greater than the Previous Maximum Quantity.
- AGLGN's maximum obligation to deliver gas to the Delivery Point is MHQ in any Hour, and MDQ on any Day (plus Authorised Overruns).

Overruns

- An Overrun will have occurred if withdrawals at the Delivery Point exceed the MHQ in any Hour or the MDQ on any Day. Overruns may be authorised or unauthorised.
- There will be no Overrun charges payable for an Overrun.

Metering

Basic Metering Equipment will be provided in accordance with the conditions in Schedule 2A.

Where AGLGN offers a Meter Data Service as a Reference Service, the Local Network Managed Capacity Service must be taken in conjunction with the Meter Data Service.

Term

The term of the Service will be one year from the commencement of the Service to the Delivery Point.

Charges

There are three categories of Charges under a Local Network Managed Capacity Service all of which are specified in Section 3:

(a)	General Charges:		
	i.	Charge for MDQ	- Section 3.1.1
	ii.	Provision of Basic Metering Equipment	- Section 3.1.2
(b)	Gas Balancing Charges		- Section 3.14
(c)	Charges for Ancillary Services		- Section 3.15

2.2.2. Trunk Managed Capacity Service

General

A Trunk Managed Capacity Service is a service for the transportation of gas by AGLGN through the Trunk from a Trunk Receipt Point to a Trunk Exit Zone for the Nominated Delivery Point.
Section 2.2.2 contains the terms and conditions applicable to a Trunk Capacity Reservation Service and lists the applicable Reference Tariffs. These terms and conditions are in addition to:

(a) the general terms and conditions in Schedule 2A and Schedule 2B;

(b) the gas balancing arrangements in Schedule 3; and

(c) the operational principles in Schedule 4.

Terms and Conditions

Availability

- The Trunk Managed Capacity Service is available as forward haul or back haul from any Trunk Receipt Point to any Trunk Exit Zone.
- The Trunk Managed Capacity Service is only available in conjunction with a corresponding Local Network Managed Capacity Service.

Nominated Delivery Point

- Users will be required to specify the Nominated Delivery Point in respect of which the Trunk Managed Capacity Service is taken.
- The quantity of gas withdrawn at the Nominated Delivery Point will be deemed to be the quantity of gas withdrawn by the User at the Trunk Exit Zone.
- The User must specify a single Receipt Point for the Nominated Delivery Point.
- The Trunk Exit Zone for the Nominated Delivery Point is referenced in Section 3.3.

MDQ and MHQ

- The MHQ and MDQ specified in the Corresponding Local Network Managed Capacity Service will apply.
- AGLGN's maximum obligation to deliver gas to the Trunk Exit Zone is MHQ in any Hour and MDQ on any Day (plus Authorised Overruns).

Overruns

- An Overrun will be deemed to have occurred if withdrawals at the Nominated Delivery Point exceed the MHQ in any Hour or the MDQ for that Delivery Point

on any Day. Overruns may be authorised or unauthorised, and an Authorised Overrun at the Nominated Delivery Point will be deemed to be an Authorised Overrun for the purposes of the Trunk Service.

- There will be no Overrun charges payable for an Overrun.

Term

- The term of the Service will be the term of the Corresponding Local Network Service.

Charges

There are two categories of Charges for a Trunk Managed Capacity Service specified in Section 3:

(a)	Charge for MDQ	–	Section 3.3
(b)	Gas Balancing Charges	–	Section 3.14

2.3 Throughput Services

2.3.1. Local Network Throughput Service

General

A Local Network Throughput Service is a service for the transportation of gas by AGLGN from the Local Network Receipt Point through the Local Network to a single Non-Tariff Delivery Point with Charges determined on the basis of throughput ($ per GJ of throughput), no charges payable for Overruns and a minimum annual bill based on 10TJ per annum.

Section 2.3.1 contains the terms and conditions applicable to a Local Network Throughput Service and lists the applicable Reference Tariffs. These terms and conditions are in addition to:

(a) the general terms and conditions in Schedule 2A and Schedule 2B;

(b) the gas balancing arrangements in Schedule 3; and

(c) the operational principles in Schedule 4.

Terms and Conditions

Availability

- The Local Network Throughput Service is available to any single Delivery Point where a Customer is reasonably expected to withdraw a quantity of gas exceeding 10TJ per Contract Year.
- Subject to the following, in the Wilton-Newcastle and Wilton-Wollongong Network Section, the Local Network Throughput Service can only be taken in conjunction with a corresponding Trunk Throughput Service.
- The requirement to have a corresponding Trunk Throughput Service does not apply to Local Network Throughput Services in the Wilton-Wollongong Network Section where Users are served by the Local Network Receipt Point at Port Kembla established with the Eastern Gas Pipeline.
- The Local Network Throughput Service is only available where all Services to the Delivery Point are Local Network Throughput Services.

Delivery Point / Receipt Point

- The Local Network Receipt Point for each Delivery Point will be determined in accordance with the Table in Section 3.3 and/or Schedule 7, except for the Wilton-Wollongong Network Section where Users must nominate either the Local Network Receipt Point at Wollongong established with the Wilton-Wollongong Trunk Section or the Local Network Receipt Point at Port Kembla established with the Eastern Gas Pipeline.

MDQ and MHQ

- Users will be required to specify a level of MHQ and MDQ which fairly reflects the maximum Hourly and Daily requirements at the Delivery Point, based on prior consumption where that information is available.
- AGLGN's maximum obligation to deliver gas to the Delivery Point is MHQ in any Hour and MDQ on any Day (plus Authorised Overruns).
- Where the User withdraws less than 10TJ of gas in any Contract Year, the User will pay for delivery of 10TJ of gas in that Contract Year (calculated on a pro-rata basis as if the consumption had been equal in each Month during the Contract Year).

Overruns

- An Overrun will have occurred if withdrawals at the Delivery Point exceed the MHQ in any Hour or the MDQ on any Day. Overruns may be authorised or unauthorised.
- There will be no Overrun charges payable for an Overrun.

Metering

- Basic Metering Equipment will be provided in accordance with the conditions in Schedule 2A.
- Where AGLGN offers a Meter Data Service as a Reference Service, the Local Network Throughput Service must be taken in conjunction with the Meter Data Service.

Term

The term of the Service will be one year from the commencement of the Service to the Delivery Point.

Charges

There are three categories of Charges under a Local Network Throughput Service, all of which are specified in Section 3:

(a)	General Charges:		
	i.	Throughput Charge	- Section 3.2.1
	ii.	Provision of Basic Metering Equipment	- Section 3.2.2
(b)	Gas Balancing Charges		- Section 3.14
(c)	Charges for Ancillary Services		- Section 3.15

2.3.2. Trunk Throughput Service

General

A Trunk Throughput Service is a service for the transportation of gas by AGLGN from the Trunk Receipt Point through the Trunk to the Trunk Exit Zone.

Section 2.3.2 contains the terms and conditions applicable to a Trunk Throughput Service and lists the applicable Reference Tariffs. These terms and conditions are in addition to:

(a) the general terms and conditions in Schedule 2A and Schedule 2B;

(b) the gas balancing arrangements in Schedule 3; and

(c) the operational principles in Schedule 4.

Terms and Conditions

Availability

- The Trunk Throughput Service is available as forward haul or back haul from any Trunk Receipt Point to any Trunk Exit Zone.
- The Trunk Throughput Service is only available in conjunction with a corresponding Local Network Throughput Service.

Nominated Delivery Point

- Users will be required to specify the Nominated Delivery Point in respect of which the Trunk Throughput Service is taken.
- The quantity of gas withdrawn at the Nominated Delivery Point will be deemed to be the quantity of gas withdrawn at the Trunk Exit Zone.
- The User must specify a single Receipt Point for the Nominated Delivery Point.
- The Trunk Exit Zone for the Nominated Delivery Point is referenced in Section 3.4.

MDQ and MHQ

- The MHQ and MDQ specified in the Corresponding Local Network Service will apply.
- AGLGN's maximum obligation to deliver gas to the Trunk Exit Zone is MHQ in any Hour and MDQ on any Day (plus Authorised Overruns).

Overruns

- An Overrun will be deemed to have occurred if withdrawals at the Nominated Delivery Point exceed the MHQ in any Hour or the MDQ for that Delivery Point on any Day. Overruns may be authorised or unauthorised, and an Authorised

Overrun at the Nominated Delivery Point will be deemed to be an Authorised Overrun for the purposes of the Trunk Service.

- There will be no Overrun charges payable for an Overrun.

Term

The term of the Service will be the term of the Corresponding Local Network Service.

Charges

There are two categories of Charges for a Trunk Throughput Service specified in Section 3:

(a)	Trunk Throughput Charge	–	Section 3.4
(b)	Gas Balancing Charges	–	Section 3.14

Where the User withdraws less than 10TJ of gas in any Contract Year, the User will pay for delivery of 10TJ of gas in that Contract Year (calculated on a pro-rata basis as if the consumption had been equal in each Month during the Contract Year).

2.4 Multiple Delivery Point Services

2.4.1. Local Network Multiple Delivery Point Service

General

A Local Network Multiple Delivery Point Service is a service for the transportation of gas by AGLGN from one or more Local Network Receipt Points through the Local Network to a number of Non-Tariff Delivery Points for a single User. The User must nominate each Delivery Point as subject to the conditions applying to a Capacity Reservation Service, a Managed Capacity Service or a Throughput Service.

Section 2.4.1 contains the terms and conditions applicable to a Local Network Multiple Delivery Point Service. These terms and conditions are in addition to:

(a) the general terms and conditions in Schedule 2A and Schedule 2B;

(b) the gas balancing arrangements in Schedule 3; and

(c) the operational principles in Schedule 4.

Terms and Conditions

Availability

The Local Network Multiple Delivery Point Service is available to any User which requires Reference Services to multiple Delivery Points, as an alternative to the User entering into separate Service Agreements in respect of each of those Delivery Points.

Receipt Points / Delivery Points

- The Delivery Points will be listed in a Schedule to the Service Agreement[2].
- Each Delivery Point will be identified as being either a Capacity Reservation Service Delivery Point, a Managed Capacity Service Delivery Point or a Throughput Service Delivery Point.
- Additional Delivery Points can be added to the Service Agreement at any time prior to the Revisions Commencement Date.

Term

The Service Agreement will remain in force for so long as there is a Delivery Point listed in the Schedule.

[2] A single Delivery Point may appear in the Schedule more than once — for example, where there are two tranches of capacity for one Delivery Point.

Applicable Terms and Conditions

The terms and conditions applying to Services under the Local Network Multiple Delivery Point Services Agreement will be those applicable to the type of Service nominated for that Delivery Point.

Charges

The Charges applying to Services under the Local Network Multiple Delivery Point Services Agreement will be those applicable to the type of Service nominated for that Delivery Point.

2.4.2. Trunk Multiple Delivery Point Service

General

A Trunk Multiple Delivery Point Service is a service for the transportation of gas by AGLGN from Trunk Receipt Points through the Trunk to Trunk Exit Zones for multiple Corresponding Local Network Services.

Section 2.4.2 contains the terms and conditions applicable to a Trunk Multiple Delivery Point Service. These terms and conditions are in addition to:

(a) the general terms and conditions in Schedule 2A and Schedule 2B;

(b) the gas balancing arrangement in Schedule 3; and

(c) the operational principles in Schedule 4.

Terms and Conditions

Availability

The Trunk Multiple Delivery Point Service is available to any User which requires transportation of gas to Trunk Exit Zones for multiple Corresponding Local Network Services, as an alternative to the User entering into separate Service Agreements in respect of each of those Services.

Nominated Delivery Points

- If a Nominated Delivery Point is added under a Corresponding Local Network Multiple Delivery Point Service, the Service Agreement will be amended to accurately reflect the addition of that Nominated Delivery Point.
- Additional Nominated Delivery Points can be added to the Service Agreement at any time prior to the Revisions Commencement Date.
- The User must specify a single Receipt Point for each Nominated Delivery Point.

Term

The Service Agreement will remain in force for so long as there is a Corresponding Local Network Multiple Delivery Point Service Agreement in force.

Applicable Terms and Conditions

The terms and conditions applying to Services under the Trunk Multiple Delivery Point Service Agreement will be those applicable to the type of Service nominated for the Nominated Delivery Point.

Charges

The Charges applying to Services under the Trunk Multiple Delivery Point Service Agreement will be those applicable to the type of Service nominated for the Nominated Delivery Point.

2.5 Tariff Services

2.5.1. Local Network Tariff Service

General

A Local Network Tariff Service is a service for the transportation of gas by AGLGN from a Local Network Receipt Point through the Local Network to a Tariff Delivery Point.

Section 2.5.1 contains the terms and conditions applicable to a Local Network Tariff Service and lists the applicable Reference Tariffs. These terms and conditions are in addition to:

(a) the general terms and conditions in Schedule 2A;

(b) the gas balancing arrangements in Schedule 3; and

(c) the operational principles in Schedule 4.

Terms and Conditions

Availability

- The Local Network Tariff Service is available to any User which requires Local Network Tariff Service to one or more Tariff Delivery Points.
- The Local Network Tariff Service is available to any Delivery Point where a Customer is reasonably expected to withdraw a quantity of gas less than 10TJ per Contract Year.
- Subject to the following, in the Wilton-Newcastle and Wilton-Wollongong Network Section, the Local Network Tariff Service can only be taken in conjunction with a corresponding Trunk Tariff Service.
- The requirement to have a corresponding Trunk Tariff Service does not apply to Local Network Tariff Services in the Wilton-Wollongong Network Section where Users are served by the Local Network Receipt Point at Port Kembla established with the Eastern Gas Pipeline.

MHQ

- For any new Delivery Point where the MHQ is expected to exceed $6m^3$/Hour, Users will be required to specify a level of MHQ which fairly reflects the maximum hourly requirement at the Delivery Point.
- AGLGN's maximum obligation to deliver gas to a Delivery Point is:
  - MHQ in any Hour (plus authorised overruns); or
  - for a Delivery Point where there is no requirement to specify MHQ, as required up to a maximum of $6m^3$/Hour.

Overruns

- An Overrun will have occurred if withdrawals at the Tariff Delivery Point exceed the MHQ in any Hour. Overruns may be authorised or unauthorised.

- There will be no Overrun charges payable for an Overrun.

Metering

- Basic Metering Equipment will be provided in accordance with the conditions in Schedule 2A.

- Where AGLGN offers a Meter Data Service as a Reference Service, the Local Network Tariff Service must be taken in conjunction with the Meter Data Service.

Receipt Points / Delivery Points

- The User will provide AGLGN with a list in an electronic or other agreed form nominating the Tariff Delivery Points to which the Tariff Service is to be provided.

- The User may from time to time add Tariff Delivery Points to the list, in accordance with the access procedures set out Schedule 6.

- The User may at any time delete a Tariff Delivery Point from the Service Agreement by giving at least three Business Days notice to AGLGN.

- The Local Network Receipt Point for each Delivery Point will be determined in accordance with the Table in Section 3.3 and/or Schedule 7, except for the Wilton-Wollongong Network Section where Users must nominate either the Local Network Receipt Point at Wollongong established with the Wilton-Wollongong Trunk Section or the Local Network Receipt Point at Port Kembla established with the Eastern Gas Pipeline.

Term

- The term of the Service Agreement for Local Network Tariff Services will be from the Commencement Date until the earlier of the Revisions Commencement Date or the date on which all Delivery Points have been deleted from the Schedule annexed to the Service Agreement, or such other date as agreed by AGLGN and the User.

- If a User wishes to continue to receive Local Network Tariff Services beyond the Revisions Commencement Date, the User will be required to enter into a Services Agreement effective as at the date of the Revisions Commencement Date.

Charges

There are three categories of Charges under a Local Network Tariff Service each of which are specified in Section 3:

(a)	General Charges:		
	i.	Throughput Charge	- Section 3.5.1
	ii.	Fixed Charge	- Section 3.5.2
	iii.	Provision of Basic Metering Equipment	- Section 3.5.3
(b)	Gas Balancing Charges		- Section 3.14
(c)	Charges for Ancillary Services		- Section 3.15

Alternative Tariff Structure

- Subject to the requirements of the National Code, AGLGN may from time to time offer an alternative Local Network tariff structure which Users may, in their complete discretion, accept or decline. If Users accept the alternative Local Network tariff structure, that tariff structure will be substituted for the tariffs otherwise payable in the manner and for the period set out in the alternative Local Network tariff structure.
- Any alternative Local Network tariff structure offered by AGLGN:
  - will be available to all Users or Prospective Users of the Local Network Tariff Service during the period for which the alternative Local Network Tariff Service structure is offered;
  - will be structured such that the average tariff under the alternative Local Network tariff structure does not exceed the average Reference Tariff established under the Access Arrangement for the Local Network Tariff Service; and
  - may be conditional on all Users of the Local Network Tariff Service accepting the offer.

2.5.2. Trunk Tariff Service

General

A Trunk Tariff Service is a service for the transportation of gas by AGLGN from one or more Trunk Receipt Points through the Trunk to one or more Trunk Exit Zones for a Corresponding Local Network Service.

Section 2.5.2 contains the terms and conditions applicable to a Trunk Tariff Service and lists the applicable Reference Tariffs. These terms and conditions are in addition to:

(a) the general terms and conditions in Schedule 2A;

(b) the gas balancing arrangement in Schedule 3; and

(c) the operational principles in Schedule 4.

Terms and Conditions

Availability

- The Trunk Tariff Service is available as forward haul or back haul from any Trunk Receipt Point to any Trunk Exit Zone.
- The Trunk Tariff Service is only available in conjunction with a corresponding Local Network Tariff Service.

Nominated Delivery Point

- Users will be required to specify the Nominated Delivery Points in respect of which transportation is taken under the Trunk Tariff Service.
- The quantity of gas withdrawn at the Nominated Delivery Point will be deemed to be the quantity of gas withdrawn by the User at the Trunk Exit Zone.
- The User must specify a single Receipt Point for each Nominated Delivery Point.
- The User will provide AGLGN with a list in an electronic or other agreed form nominating the Nominated Delivery Points to which the Tariff Service is to be provided.
- The User may from time to time add Nominated Delivery Points to the list, in accordance with the access procedures set out Schedule 6.
- The User may at any time delete a Nominated Delivery Point from the Service Agreement by giving at least three Business Days notice to AGLGN.

MHQ

- The MHQ (if any) specified under the Local Network Tariff Service will apply.

Overruns

- An Overrun will have occurred if withdrawals at the Tariff Delivery Point exceed the MHQ in any Hour. Overruns may be authorised or unauthorised.
- There will be no Overrun charges payable for an Overrun.

Term

- The Term of the Service will be the term of the Corresponding Local Network Service.
- If a User wishes to continue to receive Trunk Tariff Services beyond the Revisions Commencement Date, the User will be required to enter into a Services Agreement effective as at the date of the Revisions Commencement Date.

Charges

There are two categories of Charges for a Trunk Tariff Service which is specified in Section 3:

(a)	Trunk Tariff Service Charge	–	Section 3.6
(b)	Gas Balancing Charges	–	Section 3.14

Alternative Tariff Structure

- Subject to the requirements of the National Code, AGLGN may from time to time offer an alternative Trunk tariff structure which Users may, in their complete discretion, accept or decline. If Users accept the alternative Trunk tariff structure, that tariff structure will be substituted for the tariffs otherwise payable in the manner and for the period set out in the alternative Trunk tariff structure.
- Any alternative Trunk tariff structure offered by AGLGN:
  - will be available to all Users or Prospective Users of the Trunk Tariff Service during the period for which the alternative Trunk Tariff Service structure is offered;
  - will be structured such that the average tariff under the alternative Trunk Tariff Service structure does not exceed the average Reference Tariff established under the Access Arrangement for the Trunk Tariff Service; and
  - may be conditional on all Users of the Trunk Tariff Service accepting the offer.

2.6 Meter Data Service

General

A Meter Data Service is a service for the provision of meter reading and on-site data and communication equipment to a Delivery Point under a Reference Service Agreement.

AGLGN will read the meter at a Delivery Point in respect of which the User has entered into a Local Network Reference Service Agreement.

Section 2.6 contains the terms and conditions applicable to Meter Data Service and lists the applicable Reference Tariffs. These terms and conditions are in addition to:

(a) the general terms and conditions in Schedule 2A;

(b) the gas balancing arrangements in Schedule 3; and

(c) the operational principles in Schedule 4.

Additional eligibility requirements

This Reference Service, or relevant elements thereof, will cease to be offered as a Reference Service, and at AGLGN's discretion, as a Service, on the date of the enactment of provisions under the Gas Retail Market Business Rules that permits the provision of meter reading or on-site data and communication by a person other than AGLGN.

Terms and Conditions

Availability

- AGLGN will provide on-site data and communication equipment where economically feasible, at a Non-Tariff Delivery Point in respect of which the User has entered into a Local Network Reference Service Agreement.

Term

- The term of any Meter Data Service will be from the commencement date of the Services until the expiry date of the Local Network Reference Services for that Delivery Point, or the termination date under the Meter Data Service Agreement, which will be no later than the termination of the Local Network Reference Services for the Delivery Point.

Metering for Non Tariff Delivery Points

- Quantities of gas passing through the meter each Day will be recorded by AGLGN and the information in relation to such quantities will be accessible by AGLGN, the User and other persons as permitted by the User, at the User's cost, or in accordance with the requirements of the National Code.

- Where technically and commercially feasible, AGLGN will provide a communication system at the Delivery Point to enable daily reading of the

meter. Where there are no on-site data facilities and no communication facilities at a Delivery Point, AGLGN will read meters monthly in accordance with the meter reading cycle adopted for that locality and class of Delivery Station. Where there are on-site data facilities but no communication facilities at a Delivery Point, AGLGN will collect daily meter readings monthly in accordance with the meter reading cycle adopted for that locality and class of Delivery Station.

- If the User requires more immediate metering information than the daily information which AGLGN will make available under the above paragraph, the User may, at its expense, take information directly from the Measuring Equipment. Any connection made to the Measuring Equipment by the User must be made in accordance with the manufacturer's specification, and must be made in such a way as not to interfere with the proper operation of the Network Measuring Equipment.

Metering for Tariff Delivery Points

- Where the quantity of gas delivered to a Tariff Delivery Point is expected to be greater than 1TJ per Year, AGLGN will read the meter(s) at the Delivery Point each 30 Days (plus or minus two Days).

- Where the quantity is expected to be less than 1TJ per Year, AGLGN will read the meter(s) at the Delivery Point each 91 Days (plus or minus four Days). For specific Delivery Points, AGLGN and the User may agree that the meter will be read at different frequencies.

- AGLGN will from time to time nominate a cycle in which meters at Tariff Delivery Points will be read. AGLGN will consult with the User prior to any change to the cycle and will not vary the reading cycle unreasonably or without giving reasonable notice.

- The User may request AGLGN to vary AGLGN's reading cycle for any Delivery Point, and AGLGN will advise whether it agrees to such request and at what cost.

- AGLGN will provide the User with details of the meters and meter readings in writing if so requested or otherwise in such format as AGLGN nominates, and will provide such details within seven Business Days of the date of reading the meter.

Charges

There are two categories of Charges under a Meter Data Service specified in Section 3:

(a) Meter Reading Charge - Section 3.7

(b) Provision of On Site Data and Communication Equipment Charge - Section 3.8

2.7 Gas Swap Services

General

The Gas Swap Service is a service provided by AGLGN which entitles Users of Trunk non-tariff Reference Services to have gas delivered at an Alternate Receipt Point on a Day, or transfer gas from one User (the "**Transferor of the Gas"**) to another User (the "**Recipient of the Gas**") on a Day, after that gas has been delivered to the Network. A Gas Swap does not vary a User's Capacity entitlement under any Service.

Section 2.7 contains the terms and conditions applicable to Gas Swap Services and lists the applicable Reference Tariffs. These terms and conditions are in addition to:

(a) the general terms and conditions in Schedule 2A; and

(b) the Gas Balancing arrangements in Schedule 3; and

(c) the operational principles in Schedule 4.

Terms and Conditions

Availability

- The Gas Swap Service is available to Users of Trunk non-tariff Reference Services that wish to deliver gas at an Alternate Receipt Point on a Day, and/or that wish to transfer gas to or from another User on a Day, after that gas has been delivered to the Network.

- The Gas Swap Service is available in conjunction with any Trunk Reference Service except a Trunk Tariff Service.

Gas Swap Service

Under a Gas Swap Service:

- where one or two Users complete a Receipt Point Swap, AGLGN will accept a nominated quantity of gas to the Network at an Alternate Receipt Point on a Day, for transportation under a Service Agreement from the Principal Receipt Point (recognising a transfer of title to that gas between the Transferor of the Gas and the Recipient of the Gas at the Principal Receipt Point, in the case of two Users); or

- where two users complete a User Swap, AGLGN will accept a nominated quantity of gas to the Network at the Principal Receipt Point on a Day, recognising the transfer of title between the Transferor of the Gas and the Recipient of the Gas at that Receipt Point (the Principal Receipt Point for the Recipient of the Gas).

Notification

- Users will be required to notify AGLGN of an intended Gas Swap prior to the commencement of the Day in accordance with the timetable and formats specified by AGLGN[3].

- Where a Gas Swap is between two Users, the Transferor of the Gas must notify AGLGN proposing a Gas Swap, and the Recipient of the Gas must notify AGLGN accepting the Gas Swap. AGLGN is not obliged to acknowledge Gas Swaps where the Transferor of the Gas and the Recipient of the Gas notifications proposing and accepting a Gas Swap are not consistent and directly reciprocal transactions or where information is provided in formats or timetables other than as specified by AGLGN.

User Swaps and Receipt Point Swaps within the same Trunk Zone

Where the Principal Receipt Point is within the same Trunk Zone as the Receipt Point at which gas is received into the Network, a Gas Swap request will be accepted by AGLGN if the requirements outlined above under 'Notification' have been met and if:

- the Transferor of the Gas has arrangements in place for receipt of gas into the Network at that Receipt Point under one or more non-tariff transportation services; and

- the Recipient of the Gas[4] has arrangements in place for the transportation of gas through the Network from the Principal Receipt Point; and

- the aggregate of nominations by all Users for delivery to the Network at the Receipt Point at which gas is delivered to the Network on that Day does not exceed operational limitations of the Network.

Receipt Point Swaps across different Trunk Zones

Where the Alternate Receipt Point and the Principal Receipt Point are in different Trunk Zones, a Gas Swap request will be accepted by AGLGN if the requirements outlined above under 'Notification' have been met and if:

- the Transferor of the Gas has a Service Agreement(s) in place for receipt of gas into the Network at the Alternate Receipt Point under non-tariff services; and

- for the Day of the Gas Swap, the aggregate of the total quantity of gas to be delivered to the Network in any Trunk Zone by the Transferor of the Gas (excluding any gas balancing adjustments and tariff withdrawal requirements) plus any other quantities of gas to be transported on that Trunk Zone under non-tariff trunk services on behalf of the Transferor of the Gas, does not exceed the aggregate MDQ of all non-tariff trunk services of the Transferor of the Gas for transportation on that Trunk Zone; and

- the Recipient of the Gas has arrangements in place for the transportation of gas through the Network from the Principal Receipt Point[5].

[3] Where a user is party to more than one Gas Swap on a day, each Gas Swap must be individually notified to AGLGN

[4] Receipt Point Swaps for a single User must meet both this and the previous requirement.

[5] Receipt Point Swaps for a single User must meet both this and the previous two requirements.

Gas Balancing

- Users are responsible for the timing and coordination of Gas Swap notifications and gas balancing nominations (made in accordance with Schedule 3) to ensure that their daily withdrawal requirements and completed Gas Swaps reflect their arrangements for delivery of gas to Receipt Points for each Day. The User will be liable for and indemnify AGLGN against any costs, penalties, expenses or any other loss or damage suffered or incurred by AGLGN arising from inaccurate or misleading information supplied by the User to AGLGN in connection to a Gas Swap, or the Users participating in the Gas Swap failing to time and coordinate Gas Swap Notifications and gas balancing nominations (made in accordance with Schedule 3) to ensure that their daily withdrawal requirements and completed Gas Swaps reflect their arrangements for delivery of gas to Receipt Points for each Day.

Term

- The term of the Service will expire on the expiry date of the User's last remaining Trunk non-tariff Reference Service.

Charges

There are two categories of Charges payable for a Gas Swap Service specified in Section 3:

(a)	Gas Swap Transaction Charge	–	Section 3.9
(b)	Gas Balancing Charges	–	Section 3.14

Where a Gas Swap is between two Users, the Gas Swap Transaction Charge is payable by the Transferor of the Gas.

NON REFERENCE SERVICES

2.8 Interconnection of Embedded Network Service

General

Interconnection of Embedded Network Service is a service provided by AGLGN for the establishment of a single Delivery Point on an Embedded Network on either the Trunk or the Local Network.

Section 2.8 contains the terms and conditions applicable to Interconnection of Embedded Networks services and lists the charges payable.

Terms and Conditions

Availability

- The Interconnection of Embedded Network Service is available to any Embedded Network Operator to establish a single Delivery Point connected to an Embedded Network.

- A Prospective User of an Interconnection of Embedded Network Service may request AGLGN to provide and maintain an interconnection between a Delivery Point on the Network and a pipe or system of pipes constructed and operated by that Embedded Network Operator.

MDQ and MHQ

- The Embedded Network Operator will be required to specify an annual quantity, MHQ and MDQ which fairly reflects the maximum annual, Hourly and Daily requirements at the Delivery Point, as well as the 24 hour profile of hourly flow based on prior consumption where that information is available.

- AGLGN's maximum obligation to deliver gas to the Delivery Point under transportation agreements with all Users is the MHQ in any Hour and the MDQ on any Day specified by the Embedded Network Operator.

Metering

- AGLGN will provide Measuring Equipment for the Delivery Point.

- Measuring Equipment will be designed to accurately measure the quantities specified by the Embedded Network Operator and will provide daily meter reading.

- The Measuring Equipment will be commissioned on the commencement of the first transportation service to the Embedded Network Delivery Point on behalf of any User. The Measuring Equipment will be decommissioned when there is no agreement with any User requiring transport to the Delivery Point.

Authorisation of Embedded Network

- The Embedded Network Operator must have all relevant authorisations and must enter into an agreement with AGLGN for an Interconnection of Embedded Network service. For the absence of doubt, an Interconnection of Embedded Network Service is separate from and additional to a Service(s) requested by a User for the transportation of gas through the Network to the Embedded Network Delivery Point.

Delivery Station and Delivery Point

- The location of the Embedded Network Delivery Point on the Network will be agreed to by the Embedded Network Operator and AGLGN. AGLGN will only withhold its agreement to a location sought by the Embedded Network Operator on the basis of technical, operational or safety considerations.

- The hot tap connection to connect the Delivery Station to the Network will be designed and constructed in accordance with AGLGN's usual standards and requirements, including AS2885.

- The Delivery Station will comprise metering facilities sufficient to accurately measure the flow over the full range of anticipated flow conditions and will be designed and constructed in accordance with AGLGN's usual standards and requirements, including AS2885. If the hot tap connection is located at a point on the Network where the maximum allowable operating pressure is above 1,050kPa, the Delivery Station will include a remotely controlled isolation valve.

- Unless otherwise specified by AGLGN, the Delivery Point between the Network and the Embedded Network Operator's pipe or system of pipes will be at the flange immediately downstream of the Delivery Station described above.

- All facilities upstream of the outlet flange of the Delivery Station will be installed, owned and operated by AGLGN at the reasonable cost of the Embedded Network Operator.

- All facilities downstream of the outlet flange of the Delivery Station will be the responsibility of the Embedded Network Operator.

- Modification of the Delivery Station and hot tap connection to the Network which are required as a result of changes in the flow conditions through the Embedded Network Delivery Point will be made by AGLGN at the reasonable cost of the Embedded Network Operator unless AGLGN has recovered the costs from Users of the Embedded Network Delivery Point.

Load Shedding

- The Embedded Network Operator will be subject to load shedding arrangements. The Embedded Network Operator must have facilities available to it to reduce or discontinue the withdrawal of Gas if called upon to do so.

- Unless there is an agreement on load shedding between AGLGN and the Embedded Network Operator the Embedded Network Operator will be subject to Load Shedding priority 2 as described in Schedule 4. Network transportation

services for the delivery of Gas to the Embedded Network Delivery Point will be subject to the same Load Shedding priority.

- The Embedded Network Operator will participate in gas balancing arrangements if required.

Cathodic Protection of Facilities

- The Embedded Network Operator must design, install, and operate, any cathodic protection system necessary to protect its facilities at its own cost. Cathodic protection facilities must be installed in such a manner as to avoid any interference which may be detrimental to AGLGN's facilities and must be electrically isolated from AGLGN's facilities.

Installation and Operation

- In the interests of safety and ensuring the integrity of AGLGN's pre-existing facilities, the Embedded Network Operator must cooperate with AGLGN to establish, in a timely manner, appropriate arrangements and procedures for the safe installation and operation of the Embedded Network Operator's facilities, and for the management of emergency situations involving those facilities and the Network.

Abandonment/Disconnection

- In the event that facilities cease to be used to take Gas at the Embedded Network Delivery Point then AGLGN will at the Embedded Network Operator's expense ensure that the facilities are disconnected and isolated from AGLGN's facilities. This requirement does not apply where the cessation of use is temporary.

Approvals and Indemnity

- The Embedded Network Operator will provide AGLGN with evidence that it has fulfilled all applicable statutory requirements and that it holds all necessary permits and licences in relation to its facilities downstream of the Embedded Network Delivery Point. That evidence must be provided before the commencement of any service to the Delivery Point.

- The Embedded Network Operator will be liable for and indemnify AGLGN against any claim of liability in relation to or arising out of those facilities.

Charges

The following charges will be agreed between the Embedded Network Operator and AGLGN:

(a) Charge for engineering investigation

(b) Charge for provision of interconnection facilities

(c) Provision of Measuring Equipment

2.9 Negotiated Services

- Where a Prospective User has specific needs which differ from those which would be satisfied by a Reference Service or other Services described in this Section 2, the Prospective User may seek to negotiate different terms and conditions as a Negotiated Service.

- Should a dispute arise, it will be resolved in accordance with the dispute resolution procedures in the Gas Pipelines Access Law and the National Code, unless the parties agree otherwise.

- Where it is technically and commercially reasonable, AGLGN will offer a Trunk Negotiated Service without the linked Local Network Service where:

    - The gas is transported from a Receipt Point to a Delivery Point along the Wilton/Newcastle and or Wilton/Wollongong Trunk Sections;

    - The Delivery Point has metering equipment approved for this purpose by AGLGN; and

    - The gas transported does not utilise any component of the AGLGN Local Network prior to its delivery at its ultimate Delivery Point (i.e. at a customer site which the gas is consumed).

- Where AGLGN offers a Trunk Negotiated Service without a linked Local Network Service, then the stand-alone Trunk Negotiated Service will be offered under comparable Terms and Conditions to the equivalent Trunk Reference Services, subject to AGLGN's reasonable commercial and technical requirements.

3 REFERENCE TARIFFS

Reference Tariffs have been determined from the forecast cost of service throughout the regulatory period as set out in the Access Arrangement Information. The cost of service in the Access Arrangement Information and the numerical values for Reference Tariffs in Section 3 are expressed in 2004/05 dollars. The actual Reference Tariff applicable in a particular year is the real 2004/05 value escalated at CPI to that year in accordance with this section.

The Reference Tariffs shown in this section are inclusive of GST. A full schedule of prices in 2004/2005 dollars exclusive of GST is attached to the Access Arrangement as an addendum and forms part of the Access Arrangement Information (but does not form part of the Access Arrangement). The schedule will be updated each year and published by AGLGN.

PART 3A
REFERENCE TARIFFS FOR SERVICES RELATED TO NON-TARIFF DELIVERY POINTS

3.1 General Charges: Local Network Capacity Reservation Service and Local Network Managed Capacity Service

The general charges for the Local Network Capacity Reservation Service and the Local Network Managed Capacity Service are:

i. Charge for MDQ (see Section 3.1.1); and
ii. Provision of Basic Metering Equipment (see Section 3.1.2).

3.1.1. Charge for MDQ

The Charge for MDQ is the lesser of:

i. the Charge for MDQ under Section 3.1.1.1; and
ii. the Capped Charge for MDQ in Section 3.1.1.2.

3.1.1.1. Charge for MDQ

- The Charge for MDQ is the Annual Unit Charge for Capacity multiplied by MDQ, or corresponding MDQc if applicable. The MDQc is applicable where the Local Network Receipt Point is situated on the Network Section other than the Wilton-Newcastle or the Wilton-Wollongong Network Section.

- The Annual Unit Charge for Capacity is calculated differently for Local Network Receipt Points situated on the Wilton-Newcastle or Wilton-Wollongong Network Sections, and all other Network Sections.

- Where a Service is taken from a Local Network Receipt Point situated on the Wilton-Newcastle Network Section or the Wilton-Wollongong Network Section, the Annual Unit Charge for Capacity will be the Local Network Unit Charge.

- Where a Service is taken from a Local Network Receipt Point situated on any other Network Section, the Annual Unit Charge for Capacity will be the sum of the Local Network Unit Charge and a Pressure Reduction Unit Charge.

3.1.1.1.A Charge for MDQ (Annual Unit Charge for Capacity) - Local Network Receipt Points situated on the Wilton-Newcastle Network Section or the Wilton-Wollongong Network Section

- The Annual Unit Charge for Capacity will be the Local Network Unit Charge.
- The Local Network Unit Charge is determined by the LN Zone in which the Delivery Point is located.
- The LN Zone in which current non-Tariff Delivery Points are located is determined by reference to Tables A, B and C below.

The Local Network Unit Charges expressed in real 2004/2005 dollars ($GJ/MDQ per annum) for the LN Zones in the Sydney, Newcastle/Central Coast and Wollongong areas are:

Sydney

Local Network Unit Charge for Sydney – $/GJ of MDQ per annum in real 2004/2005 dollars[6]

	Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
LN Zone 1					
First 200GJ of booked MDQ	161.699	161.413	161.097	159.920	158.675
Next 400GJ of booked MDQ	97.019	96.847	96.658	95.952	95.205
Next 1000GJ of booked MDQ	64.680	64.565	64.439	63.968	63.470
Next 2000GJ of booked MDQ	48.510	48.424	48.330	47.977	47.603
Rest	32.340	32.283	32.219	31.984	31.735
LN Zone 2					
First 200GJ of booked MDQ	185.600	184.866	182.702	180.931	179.049
Next 400GJ of booked MDQ	111.360	110.920	109.622	108.559	107.429
Next 1000GJ of booked MDQ	74.240	73.946	73.081	72.372	71.620
Next 2000GJ of booked MDQ	55.680	55.460	54.811	54.280	53.715
Rest	37.120	36.973	36.541	36.187	35.809
LN Zone 3					
First 200GJ of booked MDQ	265.150	262.450	259.161	255.228	251.362
Next 400GJ of booked MDQ	159.090	157.469	155.497	153.137	150.818
Next 1000GJ of booked MDQ	106.060	104.980	103.664	102.091	100.544
Next 2000GJ of booked MDQ	79.545	78.735	77.748	76.568	75.408
Rest	53.030	52.490	51.832	51.046	50.272
LN Zone 4					
First 200GJ of booked MDQ	460.668	454.276	447.965	439.552	431.028
Next 400GJ of booked MDQ	276.401	272.566	268.778	263.732	258.618
Next 1000GJ of booked MDQ	184.268	181.710	179.186	175.821	172.412
Next 2000GJ of booked MDQ	138.201	136.282	134.389	131.866	129.308
Rest	92.134	90.856	89.593	87.911	86.206
LN Zone 5[7]					
First 200GJ of booked MDQ	2589.916	2553.484	2517.214	2468.095	2418.315
Next 400GJ of booked MDQ	1553.949	1532.090	1510.328	1480.857	1450.989
Next 1000GJ of booked MDQ	1035.967	1021.394	1006.885	987.238	967.326
Next 2000GJ of booked MDQ	776.975	766.046	755.164	740.429	725.495
Rest	517.983	510.697	503.443	493.620	483.663

[6] The charges in this Table are inclusive of GST.
[7] Capped charge for MDQ is expected to apply to all customers in this zone.

Newcastle/Central Coast

Local Network Unit Charge for Newcastle/Central Coast – $/GJ of MDQ per annum in real 2004/2005 dollars[8]

	Year Ending 30/6/06	Year Ending 30/6/07	Year Ending 30/6/08	Year Ending 30/6/09	Year Ending 30/6/10
LN Zone 1					
First 200GJ of booked MDQ	71.880	70.934	70.004	68.940	68.006
Next 400GJ of booked MDQ	43.128	42.560	42.002	41.364	40.805
Next 1000GJ of booked MDQ	28.752	28.373	28.002	27.576	27.203
Next 2000GJ of booked MDQ	21.563	21.281	21.001	20.682	20.402
Rest	14.376	14.187	14.001	13.789	13.602
LN Zone 2					
First 200GJ of booked MDQ	297.741	293.413	289.130	284.323	280.294
Next 400GJ of booked MDQ	178.644	176.047	173.478	170.594	168.177
Next 1000GJ of booked MDQ	119.096	117.366	115.652	113.729	112.118
Next 2000GJ of booked MDQ	89.322	88.024	86.739	85.297	84.088
Rest	59.549	58.683	57.826	56.865	56.059
LN Zone 3[9]					
First 200GJ of booked MDQ	660.587	646.502	632.622	617.845	604.968
Next 400GJ of booked MDQ	396.352	387.901	379.574	370.707	362.981
Next 1000GJ of booked MDQ	264.235	258.601	253.050	247.138	241.988
Next 2000GJ of booked MDQ	198.176	193.951	189.786	185.353	181.490
Rest	132.118	129.301	126.524	123.569	120.993

[8] The charges in this Table are inclusive of GST.
[9] Capped charge for MDQ is expected to apply to some customers in this zone.

Wollongong

Local Network Unit Charge for Wollongong – $/GJ of MDQ per annum in real 2004/2005 dollars[10]

	Year Ending 30/6/06	Year Ending 30/6/07	Year Ending 30/6/08	Year Ending 30/6/09	Year Ending 30/6/10
LN Zone 1					
First 200GJ of booked MDQ	17.785	17.650	17.342	17.438	17.760
Next 400GJ of booked MDQ	10.671	10.590	10.405	10.463	10.656
Next 1000GJ of booked MDQ	7.114	7.060	6.937	6.975	7.104
Next 2000GJ of booked MDQ	5.335	5.295	5.202	5.232	5.328
Rest	3.557	3.530	3.468	3.488	3.552
LN Zone2					
First 200GJ of booked MDQ	119.535	118.828	116.947	117.795	120.173
Next 400GJ of booked MDQ	71.721	71.297	70.168	70.677	72.104
Next 1000GJ of booked MDQ	47.814	47.531	46.779	47.117	48.069
Next 2000GJ of booked MDQ	35.860	35.648	35.083	35.339	36.053
Rest	23.907	23.766	23.389	23.559	24.035
LN Zone3[11]					
First 200GJ of booked MDQ	1809.959	1818.061	1808.303	1841.002	1898.670
Next 400GJ of booked MDQ	1085.975	1090.837	1084.982	1104.601	1139.203
Next 1000GJ of booked MDQ	723.984	727.224	723.322	736.401	759.469
Next 2000GJ of booked MDQ	542.988	545.419	542.491	552.300	569.601
Rest	361.991	363.613	361.660	368.201	379.734

TABLE A: LN Zones for Sydney area

LN Zone	Postcodes[12] and Localities
1	2164, 2171, 2761, 2762, 2766, Appin
2	2141, 2142, 2143, 2144, 2145, 2147, 2148, 2161, 2163, 2165, 2166, 2170, 2565, 2750, 2760
3	2006, 2007, 2015, 2017, 2019, 2020, 2033, 2036, 2040, 2044, 2046, 2050, 2112, 2113, 2115, 2116, 2128, 2136, 2137, 2138, 2140, 2146, 2151, 2152, 2157, 2173, 2190, 2199, 2200, 2204, 2205, 2211, 2212, 2214, 2216, 2217, 2560, 2566, 2747, 2755, 2756, 2765
4	2000, 2009, 2010, 2011, 2018, 2022, 2031, 2032, 2035, 2039, 2064, 2065, 2066, 2067, 2111, 2120, 2122, 2154, 2196, 2208, 2220, 2228, 2229, 2231, 2232, 2777
5	2028, 2076, 2077, 2080, 2085, 2095, 2099, 2100, 2103, 2780

A diagrammatic representation of the zone structure in this Table is set out in Schedule 7, but in the event of any inconsistency between the Table and Schedule 7, this Table will apply.

[10] The charges in this Table are inclusive of GST.

[11] Capped charge for MDQ is expected to apply to all customers in this zone.

[12] The Table contains those postcodes relevant to Non-Tariff Delivery Points existing as at 1 July 2004. Postcodes are based on the postcodes used by AGLGN for pricing purposes in the Access Arrangement dated September 2000. Postcodes applicable to specific Delivery Points should be verified with AGLGN and may vary from postcodes specified by Australia Post.

TABLE B: LN Zones For Newcastle/Central Coast

LN Zone	Postcodes[13]
1	2250, 2285, 2304, 2308, 2322
2	2256, 2259, 2260, 2261, 2262, 2294, 2298, 2305, 2320, 2323, 2326, 2327
3	2290, 2300, 2314, 2324, 2325, 2330

A diagrammatic representation of the zone structure in this Table is set out in Schedule 7, but in the event of any inconsistency between the Table and Schedule 7, this Table will apply.

TABLE C: LN Zones For Wollongong

Wollongong LN Zone	Postcode[14] or Locality
1	2505-BHP
2	2500, 2505, 2526
3	2516, 2527

A diagrammatic representation of the zone structure in this Table is set out in Schedule 7, but in the event of any inconsistency between the Table and Schedule 7, this Table will apply.

3.1.1.1.B Charge for MDQ (Annual Unit Charge for Capacity) - Other Network Sections

- The Annual Unit Charge for Capacity will be the sum of a Pressure Reduction Unit Charge and a Local Network Unit Charge.
- The Pressure Reduction Unit Charge and the Local Network Unit Charge will be determined in relation to an adjusted MDQ (MDQ_c) calculated in accordance with the following formula:

$$MDQ_c = (f_1 \times MDQ_{block1} + f_2 \times MDQ_{block2} + f_3 \times MDQ_{block3} + f_4 \times MDQ_{block4} + f_5 \times MDQ_{block5})$$

The scaling factors for the MDQ blocks are:

MDQ Blocks		Factor
Block 1	First 200 GJ/Day	f_1 = 1
Block 2	Next 400 GJ/Day	f_2 = 0.6
Block 3	Next 1000GJ of booked MDQ	f_3 = 0.4
Block 4	Next 2000GJ of booked MDQ	f_4 = 0.3
Block 5	Rest	f_5 = 0.2

[13] The Table contains those postcodes relevant to Non-Tariff Delivery Points existing as at 1 January 2004. Postcodes are based on the postcodes used by AGLGN for pricing purposes in the Access Arrangement dated September 2000. Postcodes applicable to specific Delivery Points should be verified with AGLGN and may vary from postcodes specified by Australia Post.

[14] The Table contains those postcodes relevant to Non-Tariff Delivery Points existing as at 1 January 2004. Postcodes are based on the postcodes used by AGLGN for pricing purposes in the Access Arrangement dated September 2000. Postcodes applicable to specific Delivery Points should be verified with AGLGN and may vary from postcodes specified by Australia Post.

The *Pressure Reduction Unit Charges* (expressed as $/GJ of MDQ_c per annum in real 2004/2005 dollars[15]) are as follows:

Year ending 30 June 2006	13.800
Year ending 30 June 2007	13.757
Year ending 30 June 2008	13.375
Year ending 30 June 2009	13.037
Year ending 30 June 2010	12.755

The *Local Network Unit Charge* = Country Unit Charge x Distance

where:

Country Unit Charge (expressed as $ /GJ of MDQ_c per annum/km in real 2004/2005dollars[16]) is as follows:

Year ending 30 June 2006	37.589
Year ending 30 June 2007	37.209
Year ending 30 June 2008	36.829
Year ending 30 June 2009	36.337
Year ending 30 June 2010	35.939

Distance is the distance in kilometres from the relevant POTS or TRS, rounded to the nearest 0.5km. For Delivery Points located within 0.5km of the POTS or TRS, Distance is 0.5km.

3.1.1.2. Capped Charge for MDQ

A User may request a Capped Charge for MDQ for a Customer. The User must in requesting a Capped Charge for MDQ nominate an annual consumption quantity[17] for that Customer, which AGLGN may adjust in a reasonable manner based on the historical usage pattern of the Customer, and which adjusted figure will be the annual quantity for the Customer (the "**Annual Quantity**").

The Capped Charge for MDQ is determined by dividing the Capped Revenue, by the MDQ[18] reserved in the Service Agreement[19] (or corresponding MDQc, if applicable), and then subtracting the Charge for MDQ for any Trunk Service to that Delivery Point.

The Capped Revenue is calculated by applying the relevant capped rate and the annual quantity block structure set out in the Table below to the Annual Quantity, and subtracting the provision of Basic Metering Equipment Charge from that total, (the "**Capped Revenue**").

The Capped Charge for MDQ will be recalculated at the anniversary of the commencement date of the Service Agreement between the User and AGLGN and, if requested by the User, on one other occasion during the term of the agreement.

[15] The charges in this Table are inclusive of GST.
[16] The charges in this Table are inclusive of GST.
[17] Where sufficient historical consumption data exists, the Annual Quantity will be the quantity metered at the Delivery Point during the 12 months prior to the date 2 months before the date from which the Capped Charge is to be applied, rounded up to the nearest 0.5TJ.
[18] Excluding any Short-Term Capacity or Summer Tranche Capacity.
[19] For Users with Managed Capacity Service, the MDQ (or corresponding MDQc, if applicable) for the purpose of this calculation will be replaced by the ninth highest actual withdrawal during the 12 months ending 2 months prior to the date from which the Capped Charge is to be applied.

Any re-calculation of the Capped Charge for MDQ will take effect on the anniversary of the commencement date or the first day of the Month commencing after the date of request (whichever is applicable), and will not have any retrospective application.

The annual quantity block structure and relevant capped rate (in real 2004/2005 dollars) are:

Annual Quantity Block Structure	Relevant Capped Rate $/GJ Equivalent (2004/2005 Dollars[20])				
	Year Ending 30/6/06	Year Ending 30/6/07	Year Ending 30/6/08	Year Ending 30/6/09	Year Ending 30/6/10
First 20 TJ p.a.	4.04	3.96	3.89	3.79	3.69
Next 30 TJ p.a.	3.29	3.23	3.16	3.08	3.00
All additional	2.78	2.73	2.68	2.61	2.54

- The Charge for MDQ and the Capped Charge for MDQ will be escalated in accordance with Section 3.10.

3.1.2. Provision of Basic Metering Equipment Charge[21]

The Provision of Basic Metering Equipment Charges is determined on the basis of the type of metering device installed at the Delivery Point.

Meter Set Type Typical/Alternative Meter	Provision of Basic Metering Equipment Charge in $ per annum expressed in real 2004/2005 dollars[22]				
	Year Ending 30/6/06	Year Ending 30/6/07	Year Ending 30/6/08	Year Ending 30/6/09	Year Ending 30/6/10
Single Run & Bypass					
AL-425	752	750	745	750	757
AL-800/AL-1000/AL-1400	1,576	1,570	1,560	1,570	1,585
AL-2300/Roots3M/Instromet G65	2,191	2,184	2,169	2,182	2,204
Romet RM140/AL-5000/ Roots 5M/Instromet G100	2,646	2,635	2,618	2,635	2,660
Roots 7M/Instromet G160	4,046	4,030	4,004	4,029	4,069
Roots 11M/Roots 16M/ Instromet G250	4,833	4,815	4,784	4,814	4,861
Singer 4GT/Rockwell AT-18/ Instromet G400	5,734	5,713	5,676	5,711	5,767
Singer 6GT/Rockwell AT-30	8,234	8,203	8,150	8,199	8,281
Singer 8GT/Rockwell AT-60	9,748	9,711	9,649	9,709	9,804
Singer 12GT	16,720	16,657	16,551	16,652	16,817
Double Run (& Bypass)					
AL-2300	4,380	4,364	4,336	4,363	4,406
AL-5000/Roots 5M/Instromet G100	5,256	5,236	5,203	5,235	5,287
Roots 7M/Instromet G160	7,684	7,655	7,605	7,653	7,728

[20] The charges in this Table are inclusive of GST.
[21] Charges for new types of metering devices introduced during the Access Arrangement will be determined on an equivalent size and functionality basis.
[22] The charges in this Table are inclusive of GST.

Meter Set Type Typical / Alternative Meter	Provision of Basic Metering Equipment Charge in $ per annum expressed in real 2004/2005 dollars[22]				
	Year Ending 30/6/06	Year Ending 30/6/07	Year Ending 30/6/08	Year Ending 30/6/09	Year Ending 30/6/10
Roots 16M/Roots 11M/ Instromet G250/Instromet G400	8,901	8,867	8,811	8,865	8,952
Singer 4GT/Rockwell AT-18	10,748	10,707	10,639	10,704	10,810
Singer 6GT/Rockwell AT-30	15,176	15,118	15,022	15,113	15,263
Singer 8GT/Rockwell AT-60	18,833	18,763	18,642	18,756	18,941
Singer 12GT/Rockwell T140/ Instromet 12"G4000	31,535	31,416	31,215	31,406	31,716
Double Run & Shunt (Shunt Meter to size)					
6GT + S	16,908	16,844	16,737	16,839	17,005
8GT + S/Rockwell AT-60 + S	20,842	20,764	20,631	20,757	20,962
12GT + S	34,994	34,862	34,639	34,851	35,195
Single Run & Shunt or Double Run (different Meters) – requiring special charges					
Roots 7M + AL425/Instromet G160 +AL 425	4,651	4,633	4,604	4,632	4,678
Roots 16M + AL1400/Instromet G400 +AL 1400	5,920	5,898	5,860	5,896	5,954
4GT + AL1400	9,115	9,081	9,022	9,077	9,167
6GT + AL 1400	9,181	9,147	9,087	9,143	9,233
6GT + AL5000	9,912	9,876	9,812	9,873	9,969

3.1.3. Short-Term Capacity Charge

The Short-Term Capacity Charge is determined by applying the premium for the period during which the Short-Term Capacity is reserved as set out in the Table below to the Charge for MDQ for the additional MDQ reserved as Short-Term Capacity:

Period of Additional Capacity	Premium
1 Week	20%
2 Weeks	15%
3 Weeks	10%
4 Weeks	0%

3.2 General Charges: Local Network Throughput Service

The general charges for the Throughput Service are:

i. Throughput Charge (see Section 3.2.1); and
ii. Provision of Basic Metering Equipment (see Section 3.2.2).

2.1.2. Throughput Charge

- The LN Zones are determined in accordance with Section 3.1.

Sydney Local Network Throughput Charges ($/GJ) in real 2004/2005 dollars[23]

	Year Ending 30/6/06	Year Ending 30/6/07	Year Ending 30/6/08	Year Ending 30/6/09	Year Ending 30/6/10
LN Zone 1	2.658	2.653	2.648	2.629	2.608
LN Zone 2	3.051	3.039	3.003	2.974	2.944
LN Zone 3	4.358	4.314	4.260	4.167	4.057
LN Zone 4	4.441	4.359	4.277	4.167	4.057
LN Zone 5	4.441	4.359	4.277	4.167	4.057

Newcastle/Central Coast Local Network Throughput Charges ($/GJ) in real 2004/2005 dollars[24]

	Year Ending 30/6/06	Year Ending 30/6/07	Year Ending 30/6/08	Year Ending 30/6/09	Year Ending 30/6/10
LN Zone 1	1.181	1.166	1.151	1.133	1.118
LN Zone 2	4.441	4.359	4.277	4.167	4.057
LN Zone 3	4.441	4.359	4.277	4.167	4.057

Wollongong Local Network Throughput Charges ($/GJ) in real 2004/2005 dollars[25]

	Year Ending 30/6/06	Year Ending 30/6/07	Year Ending 30/6/08	Year Ending 30/6/09	Year Ending 30/6/10
LN Zone 1	0.293	0.290	0.285	0.287	0.292
LN Zone 2	1.965	1.954	1.923	1.936	1.976
LN Zone 3	4.441	4.359	4.277	4.167	4.057

- The Throughput Charge for other Network Sections expressed in real 2004/2005 dollars ($/GJ) are given in the Table below.

[23] The charges in this Table are inclusive of GST
[24] The charges in this Table are inclusive of GST
[25] The charges in this Table are inclusive of GST.

Other Network Sections LN Throughput Charges ($/GJ) in real 2004/2005 dollars[26]

Distance	Year Ending 30/6/06	Year Ending 30/6/07	Year Ending 30/6/08	Year Ending 30/6/09	Year Ending 30/6/10
0.5	0.536	0.532	0.523	0.513	0.505
1	0.845	0.838	0.825	0.812	0.801
1.5	1.154	1.144	1.128	1.110	1.096
2	1.463	1.450	1.431	1.409	1.392
2.5	1.772	1.756	1.734	1.707	1.686
3	2.080	2.061	2.036	2.006	1.982
3.5	2.389	2.367	2.339	2.305	2.277
4	2.698	2.673	2.641	2.604	2.573
4.5	3.007	2.979	2.945	2.902	2.868
5	3.317	3.285	3.247	3.201	3.164
5.5	3.626	3.590	3.550	3.499	3.460
6	3.935	3.896	3.852	3.798	3.754
6.5	4.243	4.202	4.155	4.096	4.050
7 or greater	4.441	4.359	4.277	4.167	4.057

Where:

- "Distance" is the distance in kilometres from the relevant POTS or TRS to the Delivery Point, rounded to the nearest 0.5km. For Delivery Points located within 0.5km of the POTS or TRS, Distance is 0.5km.

3.2.2. Provision of Basic Metering Equipment Charge

The Provision of Basic Metering Equipment Charge applicable to the Local Network Capacity Reservation Service and the Local Network Managed Capacity Service set out in Section 3.1.2 applies.

3.3 Charge for MDQ: Trunk Capacity Reservation Service, Trunk Managed Capacity Service

The charge for MDQ is the Annual Unit Charge for Capacity multiplied by MDQ or corresponding MDQc if applicable.

The Annual Unit Charge for Capacity (subject to any Short-Term Capacity Charge) is the total of:

(a) the charge for the Trunk Zone in which the User's Receipt Point is located (**"Trunk Entry Zone**"); and

(b) the charge for the Trunk Zone from which the User's Delivery Point is supplied, ("**Trunk Exit Zone**") if the Trunk Exit Zone is different from the Trunk Entry Zone; and

(c) the charge for each Trunk Zone located between the Trunk Entry Zone and Trunk Exit Zone.

[26] The charges in this Table are inclusive of GST.

The Wilton Receipt Point is located in:

- Zone 1 for gas received into the Wilton - Newcastle Network Section; and
- Zone 7 for gas received into the Wilton -Wollongong Network Section.

The Horsley Park Receipt Point from the Eastern Gas Pipeline is located in Zone 3.

The Trunk Exit Zone is determined by reference to the postcode in which the Delivery Point is located and is defined as follows.

TABLE: Trunk Exit Zones / Local Network Receipt Point Postcodes

Trunk Zone	Postcodes and Localities[27]
1	2571, Appin
2	2560, 2565, 2566
3	2000, 2006, 2007, 2009, 2010, 2011, 2015, 2017, 2018, 2019, 2020, 2022, 2028, 2031, 2032, 2033, 2035, 2036, 2039, 2040, 2044, 2050, 2064, 2065, 2066, 2067, 2076, 2077, 2080, 2085, 2095, 2099, 2100, 2103, 2111, 2112, 2113, 2115, 2116, 2120, 2128, 2136, 2137, 2138, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2151, 2152, 2154, 2161, 2163, 2164, 2165, 2166, 2170, 2171, 2173, 2190, 2196, 2199, 2200, 2204, 2205, 2208, 2211, 2212, 2214, 2216, 2217, 2220, 2228, 2229, 2231, 2232, 2747, 2750, 2760, 2761, 2762, 2766, 2777, 2780
4	2755, 2756, 2765
5	2250, 2256, 2259, 2260, 2261, 2262
6	2285, 2290, 2294, 2298, 2300, 2304, 2305, 2308, 2314, 2320, 2322, 2323, 2324, 2325, 2326, 2327, 2330
7	2500, 2505, 2505 – BHP, 2516, 2526

3.3.1. Charge for Trunk Zone

The charge for each Trunk Zone is:

Trunk Charges – $/GJ of MDQ per annum expressed in real 2004/2005 dollars[28]

Year Ending:	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7
30 June 2006	3.174	4.929	6.389	31.071	34.737	39.227	69.112
30 June 2007	3.078	4.778	6.213	30.260	33.856	38.284	68.186
30 June 2008	2.974	4.615	6.023	29.575	33.120	37.553	66.224
30 June 2009	2.908	4.510	5.905	29.197	32.729	37.206	64.973
30 June 2010	2.842	4.404	5.788	28.787	32.297	36.814	64.031

[27] The table contains those postcodes relevant to Non-Tariff Delivery Points existing as at 1 January 2004. Postcodes are based on the postcodes used by AGLGN for pricing purposes in the Access Arrangement dated September 2000. Postcodes applicable to specific Delivery Points should be verified with AGLGN and may vary from postcodes specified by Australia Post.

[28] The charges in this Table are inclusive of GST.

3.3.2. Short-Term Capacity Charge

The Short-Term Capacity Charge is determined by applying the premium for the period during which the Short-Term Capacity is reserved as set out in the Table below to the Charge for MDQ for the additional MDQ reserved as Short-Term Capacity:

Period of Additional Capacity	Premium
1 Week	20%
2 Weeks	15%
3 Weeks	10%
4 Weeks	0%

3.4 Trunk Throughput Charge

The Trunk Throughput Charge is the total of:

(a) the charge for the Trunk Zone in which the User's Receipt Point is located ("Trunk Entry Zone"); and

(b) the charge for the Trunk Zone from which the User's Delivery Point is supplied, ("Trunk Exit Zone") if the Exit Zone is different from the Entry Zone; and

(c) the charge for each Trunk Zone located between the Trunk Entry Zone and Trunk Exit Zone.

The Trunk Entry Zones and Trunk Exit Zones are determined in the same way as described in Section 3.3.

Trunk Throughput Charges ($/GJ) in real 2004/2005 dollars[29]

	Year Ending 30/6/06	Year Ending 30/6/07	Year Ending 30/6/08	Year Ending 30/6/09	Year Ending 30/6/10
Zone 1	0.0521	0.0506	0.0488	0.0479	0.0468
Zone 2	0.0811	0.0785	0.0759	0.0741	0.0724
Zone 3	0.1051	0.1021	0.0990	0.0970	0.0952
Zone 4	0.5107	0.4974	0.4862	0.4799	0.4732
Zone 5	0.5710	0.5565	0.5444	0.5380	0.5309
Zone 6	0.6448	0.6293	0.6173	0.6116	0.6051
Zone 7	1.1361	1.1209	1.0887	1.068	1.0526

[29] The charges in this Table are inclusive of GST.

PART 3B: REFERENCE TARIFFS FOR SERVICES RELATED TO TARIFF DELIVERY POINTS

3.5 General Charges: Local Network Tariff Service

The general charges for the Local Network Tariff Service are:

i. Throughput Charge (see Section 3.5.1);
ii. Fixed Charge (see Section 3.5.2); and
iii. Provision of Basic Metering Equipment (see Section 3.5.3).

3.5.1. Throughput Charge

The Throughput Charges for the Tariff Service in real 2004/2005 dollars are:

Throughput Charge for Tariff Service ($/GJ) in real 2004/2005 dollars[30]

Block Size (GJ Per Qtr)	Year Ending 30/6/06 ($ per GJ)	Year Ending 30/6/07 ($ per GJ)	Year Ending 30/6/08 ($ per GJ)	Year Ending 30/6/09 ($ per GJ)	Year Ending 30/6/10 ($ per GJ)
First 3.75	9.408	9.374	9.363	9.353	9.345
Next 4.5	6.169	5.961	5.752	5.523	5.299
Next 17.25	5.920	5.721	5.521	5.301	5.086
Next 225	5.786	5.591	5.396	5.181	4.971
Next 1000.5	5.005	4.837	4.667	4.481	4.300
All additional	3.762	3.636	3.508	3.368	3.232

[30] The charges in this Table are inclusive of GST.

3.5.2. Fixed Charge[31]

The Fixed Charges for the Tariff Service per annum in real 2004/2005 dollars[32] are:

Year Ending 30/6/06	Year Ending 30/6/07	Year Ending 30/6/08	Year Ending 30/6/09	Year Ending 30/6/10
47.183	47.012	46.956	46.907	46.863

3.5.3. Provision of Basic Metering Equipment Charge

Provision of Basic Metering Equipment Charge per annum in real 2004/2005 dollars[33]

Meter Provision Charges	Year Ending 30/6/06	Year Ending 30/6/07	Year Ending 30/6/08	Year Ending 30/6/09	Year Ending 30/6/10
For meters with capacity less than or equal to 6m3/hr ($ p.a.)	20.868	22.475	23.813	25.541	27.190
For meters with a capacity of greater than 6m3/hr ($/GJ)	0.225	0.244	0.260	0.280	0.300

The Provision of Basic Metering Equipment Charge is payable each billing period. For meters with a capacity greater than $6m^3$/hr there is a minimum payable each billing period. This minimum in real 2004/2005 dollars is 3.75 per monthly billing period and 11.26 per quarterly billing period.

3.6 Trunk Tariff Service Charge

Charge for Trunk Tariff Service ($/GJ) in real 2004/2005 dollars[34]

Year Ending 30/6/06	Year Ending 30/6/07	Year Ending 30/6/08	Year Ending 30/6/09	Year Ending 30/6/10
0.1991	0.1921	0.1877	0.1859	0.1838

[31] In residential complexes where hot water is supplied through a gas fired centralised hot water system, each residential unit will be charged the fixed charge and metering charges applicable to a $6m^3$/hr meter.
[32] The charges in this Table are inclusive of GST.
[33] The charges in this Table are inclusive of GST.
[34] The charges in this Table are inclusive of GST.

PART 3C:
REFERENCE TARIFFS FOR METER DATA SERVICES

3.7 Meter Reading Charge

The Meter Reading Charge is payable each billing period.

Meter Reading Charge for Tariff Delivery Points ($ p.a.) in real 2004/2005 dollars[35]

Meter Reading Cycle	Year Ending 30/6/06	Year Ending 30/6/07	Year Ending 30/6/08	Year Ending 30/6/09	Year Ending 30/6/10
Quarterly	3.164	3.060	2.959	2.908	2.869
Monthly	35.352	34.181	33.063	32.490	32.053

Meter Reading Charge for Non-Tariff Delivery Points ($ p.a.) in real 2004/2005 dollars[36]

Meter Reading Cycle	Year Ending 30/6/06	Year Ending 30/6/07	Year Ending 30/6/08	Year Ending 30/6/09	Year Ending 30/6/10
Charge per Delivery Station (includes the first 2 meters at a Delivery Station)	531	530	525	527	532
Charge for each additional 1 or 2 meters at a Delivery Station	127	125	123	124	127

[35] The charges in this Table are inclusive of GST
[36] The charges in this Table are inclusive of GST

3.8 Provision of On-Site Data and Communication Equipment Charge

The Provision of On-Site Data and Communication Equipment Charge is payable each billing period.

Provision of On-Site Data and Communication Equipment Charge ($ p.a.) in real 1999/2000 dollars[37]

Meter Reading Cycle	Year Ending 30/6/06	Year Ending 30/6/07	Year Ending 30/6/08	Year Ending 30/6/09	Year Ending 30/6/10
Charge per Delivery Station (includes the first 2 meters at a Delivery Station)	991	987	977	983	993
Charge for each additional 1 or 2 meters at a Delivery Station	234	234	232	233	235

[37] The charges in this Table are inclusive of GST

PART 3D:
REFERENCE TARIFFS FOR GAS SWAP SERVICES

3.9 Gas Swap Transaction Charge

The Gas Swap Transaction Charge is the Gas Swap rate multiplied by the quantity nominated during notification of the Gas Swap.

Gas Swap Transaction Charge – $/GJ in real 2004/2005 dollars[38]
$0.0385

PART 3E:
VARIATIONS TO REFERENCE TARIFFS

3.10 General

AGLGN may vary the Reference Tariffs in accordance with the variation methods set out in Section 3.11. AGLGN is required to comply with the notification requirements set out in Section 3.12. Variations may result in both increases or decreases in Reference Tariffs.

AGLGN may only vary its Reference Tariffs for any year during the Access Arrangement Period with effect from 1 July of that year (or any other date determined by the relevant regulator).

3.11 Variation methods

3.11.1. Escalation of Reference Tariffs

Reference Tariffs will be adjusted by the rate of change in the average of the CPI for the four quarters to December in the relevant year divided by the average of the CPI for the four quarters to December in the immediately preceding year

Where:

CPI means the CPI as calculated and published by the Australian Bureau of Statistics from time to time. If the Australian Bureau of Statistics does not, or ceases to, calculate and publish it, then CPI will mean:

i. an index published by the Commonwealth Treasury which is its best estimate of CPI; or

ii. if Commonwealth Treasury does not, or ceases to publish an index then an index published by the Reserve Bank of Australia which is its best estimate of CPI ; or

iii. if the Reserve Bank of Australia does not, or ceases to publish an index, then at the Relevant Regulator's discretion, either:

[38] The charges in this Table are inclusive of GST

(A) an index published by a person appointed by the Relevant Regulator which is that person's best estimate of CPI; or

(B) an index published by the Relevant Regulator that is its best estimate of the CPI.

3.11.2. Unaccounted for Gas

- Subject to clause 12.2 of Schedule 2A, each year (or part thereof) of the Access Arrangement, Unaccounted for Gas (UAG) will be purchased by AGLGN through a competitive tender conducted by AGLGN at such times as it reasonably determines.

- The forecast UAG level is 2.2 per cent of gas receipts for 2005/06 and 2.1 percent of gas receipts for 2006/07 to 2009/10.

- Reference Tariffs will be adjusted each year to account for the variation between the allowance for UAG included in the cost of service for the previous year in the Access Arrangement and the multiple of:

  - the latest forecast of gas receipts for the previous year;

  - the forecast UAG level; and

  - the actual average price per gigajoule paid for gas pursuant to the competitive tender or tenders during that year.

- Reference Tariffs will be adjusted in the event that UAG is removed as a Network cost during the Access Arrangement Period.

3.11.3. Cost pass-through

AGLGN may vary Reference Tariffs where there is a material impact on the cost of providing Reference Services as a result of one of the cost pass-through events, and where such cost was not incorporated in the determination of Reference Tariffs at the commencement date of the Access Arrangement. Cost pass-through events include:

- a Change in Tax Event; and
- a Regulatory Event;

where:

"Change in Tax Event" means:

(a) a change in the way or rate at which a Relevant Tax is calculated (including a change in the application or official interpretation of Relevant Tax); or

(b) the removal of a Relevant Tax or imposition of a new Relevant Tax;

which, in each case, occurs after the commencement date of the Access Arrangement.

"**Regulatory Event**" means any decision made by the Relevant Regulator or any other authority or any amendment to applicable law after the commencement date of the Access Arrangement which has the effect of:

(a) imposing minimum standards (including network design and operational standards and safety standards) on AGLGN that are different from the standards imposed at the commencement date of the Access Arrangement;

(b) substantially altering the manner in which AGLGN is required to undertake any activity forming part of, or ancillary to, its Reference Services (including through rules for the operation of competitive gas markets); or

(c) changing or introducing any authorisation fee, licence fee or statutory charge

but does not include a Change in Tax Event or events leading to variations under Section 3.11.4.

3.11.4. Guaranteed Customer Service Standards

AGLGN may vary Reference Tariffs to recover:

(a) The expected value of payments that may be required to be made to Users by AGLGN as a result of the imposition of Guaranteed Customer Service Standards (GCSS) as a result of a decision of the Minister for Energy and Utilities to introduce new GCSS payments in addition to those that apply in respect of AGLGN at the commencement of the Access Arrangement Period.

(b) Incremental and efficient costs associated with the administration of any such additional or changed Guaranteed Customer Service Standards described in paragraph (a) above.

3.11.5. Allocation of Pass Through Costs

In determining adjustments to the reference tariffs under Sections 3.11.3 and 3.11.4, the amount shall be allocated to the Contract and Tariff Markets according to the same allocation methodology used in initially setting the Reference Tariffs.

3.12 Notification

The following conditions apply to variations to Reference Tariffs in accordance with the variation methods set out in Section 3.11:

- if AGLGN wishes to vary the Tariffs, AGLGN must give the Relevant Regulator at least 50 Business Days notice prior to the effective date of the variation;
- the Relevant Regulator may initiate variations in accordance with the National Code;
- variations are subject to the Relevant Regulator's approval (deemed or otherwise in accordance with the National Code), and reasonable satisfaction that the variation is based on incremental and efficient costs;
- Variation notices provided to the Relevant Regulator must include information required by the National Code including:

i. the effective date of the variation; and
ii. an explanation of how the proposed variation is consistent with the approved variation method;

- Variation notices provided to the Relevant Regulator should include:

i. details of the financial impact on AGLGN and users with supporting documentary evidence including a demonstration that costs are incremental and efficient; and
ii. an explanation of how the variation is to be recovered through Tariffs.

PART 3F: OTHER CHARGES

3.13 Overrun Charges

- Overrun Charges are payable in respect of Overruns under Local Network Capacity Reservation Service Agreements and Trunk Capacity Reservation Service Agreements.

- Overrun Charges are payable only in respect of Overruns relating to MDQ in any Day and are not payable in respect of Overruns relating to MHQ.

- For each Day on which an Overrun occurs, the User must pay an Overrun Charge calculated by multiplying the Overrun quantity by 1/365 if authorised, and 1.5/365 if unauthorised, of the Annual Unit Charge for Capacity.

- In addition to the Daily Overrun Charge the User will also be liable to pay an annual Overrun Charge as follows:

  - For Overruns up to the Charge Number in the Period, the annual Overrun Charge will be nil.

  - If the number of Overruns in the Period is greater than the Charge Number, the annual Overrun Charge will be the time-weighted average Annual Unit Charge for Capacity[39] during the Period multiplied by the Relevant Quantity.

  - The Relevant Quantity will be determined as follows:

    (i) if the number of overrun Days during the Period is equal to the Charge Number plus one, the Relevant Quantity will be the daily overrun quantity which is third in the order of all daily overrun quantities for the Period when ranked from largest to smallest[40];

    (ii) if the number of overrun days is equal to the Charge Number plus two, then the Relevant Quantity will be the second in that ranking;

    (iii) if the number of overrun days is equal to the Charge Number plus three, four or five, then the Relevant Quantity will be the largest daily overrun quantity; and

    (iv) if the number of overrun days is equal to or greater than the Charge Number plus six, the Relevant Quantity will be 1.2 times the largest daily overrun quantity.

[39] Time weighting is required to reflect the fact that the Annual Unit Charge for Capacity may change in the course of the Period.

[40] For example, if the Charge Number was 12 and there were 13 overrun Days, with daily overrun quantities of 9, 3, 2, 8, 8, 6, 5, 3, 7, 6, 2, 4 and 5, then the ranking would be 9, 8, 8, 7, 6, 6, 5, 5, 4, 3, 2, 2 and the Relevant Quantity would be 8.

Where:

"**Charge Number**" means:

i. nine Days plus,
ii. for each Month or part Month in excess of 12 Months but less than a whole Contract Year in the Period, an additional ¾ of a day, rounded up to the nearest whole number[41].

"**Period**" means a Contract Year plus the number of Months or part Months in the Term in excess of 12 Months but less than a whole Contract Year.

- Any charge payable by a User in respect of an Overrun is payable in addition to, and not in substitution for, any other charge under the Service Agreement.

- Payment of Overrun Charges does not alter MDQ specified in the Service Agreement.

3.14 Gas Balancing Charges

Gas Balancing Charges are best understood in the context of the conditions relating to Gas Balancing, and accordingly are set out in Schedule 3.

3.15 Charges for Ancillary Services

Charges for the following Ancillary Services are set out in the table below in real 2004/2005 dollars:

- Request For Service – for time spent collating the information and writing the letter of offer to a User (or Prospective User) when the User requests a new/additional/changed Service.

- Special Meter Read – for reads requested by a User rather than ordinary reads (for instance when the meter reader makes a special visit to read a particular meter out of the usual meter reading route). This service must be scheduled with a minimum 5 day notice period.

- Residential Disconnection Fee – this charge covers disconnection of meters with a capacity of less than or equal to 6m^3/hr. The specific method of disconnection will be at the discretion of AGLGN to ensure the site is able to be left in a safe state. The fee also covers the cost of subsequent reconnection for disconnections which are temporary in nature.

[41] For example, if the Term is 20 Months, the Charge Number is 15, being 9 plus (8 x ¾). If the Term is 21½ Months, the Charge Number is 17, being 9 plus (10 x ¾ rounded up to the nearest whole number).

- Business Disconnection Fee – this charge covers disconnection of meters with a capacity of greater than $6m^3$/hr. The specific method of disconnection will be at the discretion of AGLGN to ensure the site is able to be left in a safe state. The fee also covers the cost of subsequent reconnection for disconnections which are temporary in nature.

	GST inclusive (2004/2005 dollars)
Request for Service	$60, plus $60 per hour after the first hour
Special meter read	$25
Residential Disconnection fee[42]	$75
Business Disconnection fee[43]	$300

With effect from 1 July 2005 and each year thereafter, the escalation formula set out in Section clause 3.11.1, will apply to the Charges for Ancillary Services.

[42] Disconnection services will be provided in accordance with the current Network Code in place as at the effective date of this Access Arrangement.

[43] Disconnection services will be provided in accordance with the current Network Code in place as at the effective date of this Access Arrangement.

PART 3G:

GENERAL PROVISIONS ON REFERENCE TARIFFS

3.16 Date of Application of Reference Tariffs

Reference Tariffs apply from the date on which the approval of the Relevant Regulator takes effect under Section 2 of the National Code.

3.17 Reference Tariffs after 30 June 2010

Where the Revisions Commencement Date is later than 30 June 2010:

- the Reference Tariff for the Reference Services for the period between 30 June 2010 and the Revisions Commencement Date will be the Reference Tariff for the Transportation Service as at 30 June 2010; and
- the Reference Service will be supplied on the terms and conditions then applicable for that Reference Service.

3.18 Reference Tariffs after Revisions Commencement Date

Where a Service Agreement extends beyond the Revisions Commencement Date, the tariffs payable under the Service Agreement will be the Reference Tariff then payable for a comparable Service, or as otherwise agreed. In respect of a Throughput Service, should the parties fail to agree then the Reference Tariff payable for the Tariff Service will apply.

PART 3H: GST

3.19 GST

Unless expressly stated otherwise, all amounts payable or the value of other consideration provided in respect of supplies made in relation to this Access Arrangement are exclusive of GST (if any). If GST is levied or imposed on any supply made (or deemed to have been made) under or in accordance with this Access Arrangement, the amounts payable or the value of the consideration provided for that supply (or deemed supply) ("**Payment**") shall be increased by such amount as is necessary to ensure that the amount of the Payment net of GST is the same as it would have been prior to the imposition of GST.

All monetary amounts specified in Section 3 of this Access Arrangement are inclusive of GST. If the applicable rate of GST changes after the date of this Access Arrangement AGLGN must adjust the amounts payable set out in the Section 3 to reflect that change from the date the change is effective.

Where any amount is payable to a party as a reimbursement, indemnification or similar payment calculated by reference to a loss, cost, expense or other amount incurred by that party, then that amount must be reduced by the amount of any input tax credit available to that party and, if a taxable supply, must be increased by an additional amount equal to the GST payable in relation to the supply.

All GST payable shall be payable at the time any payment to which it relates is payable. Where any GST payable is not referable to an actual payment then it must be paid within 10 days of a tax invoice being issued by the party making the supply.

Where in relation to this Access Arrangement a party makes a taxable supply, that party must provide a tax invoice in respect of that supply before the GST payable in respect of that supply becomes due.

Terms defined in A New Tax System (Goods and Services Tax) Act 1999 of Australia have the same meaning when used in this clause.

4 REFERENCE TARIFF POLICY

4.1 Description of Principles

- Reference Tariffs are determined using a "Price Path" Approach with Total Revenue calculated using a Cost of Service Approach methodology. Price paths for the Reference Tariffs will result in a return on capital of 7.00% (pre tax real) over the Access Arrangement Period. A current cost accounting approach to the asset base and depreciation using annual indexation by the CPI and a real pre-tax cost of capital was applied to determine the price path.

- The initial Capital Base was redetermined in the Final Decision 2000 as provided for under Section 9 of the NSW Code and Schedule 2 of the Gas Pipelines Access Law.

- The initial Capital Base (1 July 1996) was allocated to the Wilton- Newcastle Trunk Section, Wilton-Wollongong Trunk Section, the Central West distribution system and the NSW distribution system in accordance with the Final Decision 2000. This applied the DORC valuation determined by the Relevant Regulator under the Final Decision 2000 to the Wilton –Newcastle Trunk Section and to the Wilton-Wollongong Trunk Section. The remainder of the initial Capital Base (after subtracting the values assigned to the Trunk Sections) was allocated to the combined Central West and NSW distribution systems.

- The initial Capital Base as allocated was rolled forward to 1 July 1999 as shown in the Final Decision 2000 and then to June 2003 using actual capital expenditure, depreciation, escalation and disposals. Finally the Capital Base is rolled forward to June 2010 using forecast capital expenditure, depreciation, escalation and disposals.

- Separate asset values and costs are determined for the Trunk Sections to allocate costs and revenues to contract and tariff customers using fully distributed costs.

- The Local Network revenue pools for each market segment and region are determined by allocating revenue to Services equal to the forecast capital and operating cost components for each market segment and region. Capital costs are allocated between non-tariff and tariff segments on the basis of a fully distributed allocation of asset values. Operating costs are allocated on the basis of an activity based costing allocation.

- Prices for the non-tariff segment are then derived by allocation of revenue to zones that reflected the cost of providing a Service to Users in those zones. A single block structure applies to the Tariff segment. Different prices apply in certain country areas.

- Details of the cost allocation and pricing structures are set out in Sections 9 and 10 of the Access Arrangement Information.

- For the purposes of this Access Arrangement the Local Network is to be treated as a single Covered Pipeline.

4.2 Additional Matters

4.2.1. Capital Redundancy Mechanism

(a) The Relevant Regulator may reduce the Capital Base with effect from the commencement of the Access Arrangement Period (immediately following the conclusion of the current Access Arrangement Period) if it is of the reasonable opinion that any of the following have occurred in relation to assets comprising some or all of the Capital Base:

(i) the assets have ceased to contribute to the delivery of Services;

(ii) the assets have been sold or disposed of by AGLGN or AGLGN has entered into a binding agreement for their sale or disposal; or

(iii) the assets have decreased in value because of a decrease in their utilisation.

(b) In determining whether to reduce the Capital Base under Section 4.2.1 paragraph (a), and the amount (to be determined by the Relevant Regulator) by which the Capital Base should be reduced, the Relevant Regulator may take into account:

(i) The value of the assets when the assets were first included in the Capital Base, and their current value;

(ii) The value that the assets to be removed from the Capital Base represent as a proportion of the total Capital Base;

(iii) The Cost to AGLGN of a reduction in Total Revenue resulting from a reduction of the Capital Base;

(iv) The impact of a reduction of the Capital Base on Tariffs paid by Users;

(v) The objectives and principles of the National Code; and

(vi) Any other factors that in the reasonable opinion of the Relevant Regulator are relevant and not inconsistent with the National Code.

4.2.2. New Facilities Investment

AGLGN may undertake New Facilities Investment that does not satisfy the requirements of Section 8.16 of the National Code. If AGLGN incurs such New Facilities Investments, the Capital Base may be increased by that part of the New Facilities Investment, which does satisfy Section 8.16 of the National Code (referred to in the National Code as the "Recoverable Portion").

4.2.3. Incentive Mechanism

The Incentive Mechanism used in calculating the Reference Tariffs is that:

- Reference Tariffs will apply during each year of the Access Arrangement Period regardless of whether the forecasts on which the Reference Tariffs were determined are realised.
- AGLGN may retain any benefit where it achieves a lower UAG level than the amount assumed for each year of the Access Arrangement Period.

4.2.4. Review of Capital Base after Expiry of an Access Arrangement

The Capital Base at the commencement of the next Access Arrangement period and each Access Arrangement Period after the next will be assessed by the Relevant Regulator using, among other things, the information in relation to those assets in:

(a) the asset register referred to in Section 9.1 of this Access Arrangement; and

(b) the database on capital contributions referred to in Section 9.2 of this Access Arrangement.

5 TRADING POLICY

5.1 Bare Transfer

- A User may make a Bare Transfer to another person (**the transferee**).
- Prior to utilising any transferred Contracted Capacity, the transferee must notify AGLGN of the portion of the Contracted Capacity subject to the Bare Transfer and the nature of the Contracted Capacity subject to the Bare Transfer.
- A Bare Transfer under a Local Network Service will operate as a Bare Transfer of the same portion of the Contract Capacity under the Corresponding Trunk Service.

5.2 Substituted Transfer

- A User may effect a Substituted Transfer with the prior written consent of AGLGN which shall only be withheld on reasonable commercial or technical grounds, and which may be given subject to reasonable commercial and technical conditions.
- A transfer or assignment under a Local Network Reference Service will operate as a transfer or assignment of the same portion of the Contract Capacity under the Corresponding Trunk Reference Service.

5.3 Change of Receipt Point or Delivery Point

- The User may change the Receipt Point under a Trunk Service and/or the Delivery Point under a Local Network Service specified in a Service Agreement with the prior written consent of AGLGN which shall only be withheld on reasonable commercial or technical grounds, and which may be given subject to reasonable commercial and technical conditions.
- Consent will generally be given if:

  (a) the proposed Receipt Point is downstream of the Receipt Point specified in the Trunk Service Agreement;

  (b) the proposed Delivery Point is upstream of the Delivery Point specified in the Local Network Service Agreement.

5.4 Response to Requests

- AGLGN will reply to any request from a User for AGLGN's consent to a Transfer (other than a Bare Transfer), or for a change of Receipt Point or Delivery Point, within 14 Business Days of receiving the request accompanied by information which is reasonably necessary to enable AGLGN to consider the request.
- If at the time the request is made the User informs AGLGN that due to hardship the User requires an urgent reply to its request, AGLGN will use reasonable endeavours to respond to the request within two Business Days of receiving the request.

6 QUEUING POLICY

6.1 Forming the Queue

- Where there is insufficient capacity to satisfy a Request and AGLGN receives a Request from a User, a queue will be formed.
- A queue will include all relevant Requests which cannot be satisfied. Where an offer has been made in response to a Request received prior to formation of the queue, that Request will take first position in the queue.
- At the time a Request is placed in a new or existing queue, AGLGN will advise the Prospective User of:

  (a) its position in the queue;

  (b) the aggregate capacity sought under Requests which are ahead in the queue;

  (c) its estimate of when capacity may become available; and

  (d) the size of any surcharge that may apply to Developable Capacity.
- When the position of a Request changes relative to other Requests which are ahead in the queue (such as where a Request ceases to be on the queue) or where the timing of availability of a new tranche of Developable Capacity changes, AGLGN will provide revised information to the Prospective User.
- Where a Request is made for a Service to a Delivery Point and AGLGN is satisfied that the Request is for the same tranche of capacity which is already provided to another User, in respect of that Delivery Point, then AGLGN may make that tranche of capacity available in response to the Request before satisfying any other requests in a queue to the extent that the existing User is otherwise entitled to maintain or extend that tranche of capacity.

6.2 Conditions Applicable on Queue

- A Prospective User may reduce but not increase the capacity sought in a Request which is in a queue.
- Once every three months, AGLGN may seek confirmation from a Prospective User that it wishes to continue with its Request. If a Prospective User fails to respond within 14 days the Request will lapse.
- A Prospective User must advise AGLGN if it does not wish to proceed with a Request, which will then lapse.
- Any lapsed Request must be removed from the queue and priority will be lost.
- A Prospective User may only assign a Request in a queue to a bona fide purchaser of the Prospective User's business and/or assets, subject to AGLGN's prudential requirements.
- A Request may lapse if, on assignment of a controlling interest in the shares of the Prospective User, the assignee fails to provide a guarantee as required by AGLGN or to meet AGLGN's prudential requirements.

6.3 Procedure When Capacity Can Be Made Available

- When capacity can be made available which meets the requirements of any Request in a queue:
  - that capacity will be progressively offered to each Prospective User in the queue in order of priority (notwithstanding that such capacity is not sufficient to meet the needs of that Prospective User); and
  - AGLGN will advise each of those Prospective Users of its plans to make capacity available, and the terms and conditions on which the capacity will be available.
- A Prospective User will have 30 days after an offer is made to enter into a Service Agreement (conditional if necessary on AGLGN entering into Service Agreements with other Prospective Users), failing which the Request will lapse or lose priority to those entering into such a Service Agreement (upon that Agreement becoming unconditional).
- Where the Prospective User has lodged a Linked Request, the 30 day period will begin on the date that an offer is made in respect of both the Trunk and the Local Network.

6.4 Priority of Prospective Users in Obtaining Services

- The priority date of a Request is the date a complete Request is received by AGLGN.
- Where AGLGN determines that two or more Requests relate to the same tranche of capacity for the same Delivery Point, all those Requests will have the priority date of the earliest Request.
- A Request for a Reference Service will have priority over a Request for a Negotiated Service.

6.5 Compensation for Holding Capacity

- AGLGN may require the User to pay compensation for AGLGN agreeing to commence a Service more than 30 days from the execution of a Service Agreement where the commitment of capacity to meet the requirements of the User contributes to:
  - the continuation of a queue,
  - the formation of a queue at any time prior to the commencement date, or
  - the acceleration of investment by AGLGN to provide capacity for other Users on the transportation route.

6.6 General

- A Request will not lapse and will retain its priority in a queue in the event of a dispute being notified, until that dispute has been resolved in accordance with the National Code.

- Where a queue exists a Prospective User must on request demonstrate to AGLGN that the Prospective User will have access to a supply of gas at the time it is anticipated that the Prospective User will be offered access to the Service.

7 EXTENSIONS / EXPANSIONS POLICY

- The following method shall be used to determine whether an extension or expansion of a Covered Pipeline should be taken to form part of the Covered Pipeline:

  (a) Subject to this clause, an extension or expansion of a Covered Pipeline will be taken to form part of the Covered Pipeline (and will be treated for all purposes as part of the Covered Pipeline) from the date of completion of the extension or expansion.

  (b) AGLGN may apply to the Relevant Regulator in writing for a declaration by the Relevant Regulator that paragraph (a) will not apply to the extension or expansion referred to in the application.

  (c) After considering an application and undertaking such consultation as the Relevant Regulator considers appropriate, the Relevant Regulator must advise AGLGN whether or not it makes the declaration.

  (d) A declaration may be made on such reasonable conditions determined by the Relevant Regulator and will have the operation specified in the declaration.

- An extension includes any pipes laid in NSW in a distribution system owned and operated by AGLGN at any time during the Access Arrangement (where “distribution system” has the meaning given to it in the Gas Supply Act).
- No extension or expansion will affect Reference Tariffs.
- AGLGN will offer Reference Services in respect of such extension or expansion at the Reference Tariffs and may require a Surcharge in respect of such Reference Services where a Surcharge is allowed under the National Code.
- Where a User seeks a Capacity Reservation Service or a Managed Capacity Service in respect of an extension or expansions where there is no Local Network Unit Charge specified in Section 3 applicable to the Delivery Point, AGLGN will offer the Service at a tariff calculated on a basis consistent with the method adopted in establishing the Reference Tariffs.

8 CAPACITY MANAGEMENT POLICY

The Network is a Contract Carriage Pipeline.

9 ASSET REGISTER, CAPITAL CONTRIBUTION DATA BASE AND UAG AUDIT

9.1 Asset Register

AGLGN will maintain a regulatory asset register during the Access Arrangement Period. The asset register will (without limiting the matters that may be included) include information on:

- economic asset lives and remaining asset lives underlying the initial Capital Base at 1 July 1996;
- asset components (i.e. asset types, unit rates and asset quantities) consistent with the initial Capital Base at 1 July 1996 in the Final Decision 2000. The asset components should be consistent with those used in AGLGN's depreciated optimised replacement cost valuation in its September 2000 Access Arrangement Information;
- the rolled forward Capital Base at 1 July 1999 consistent with the Final Decision 2000;
- new capital expenditure incurred after 1 July 1999 including information on economic asset lives, unit rates and asset quantities; and
- existing and new assets are to be shown by Covered Pipeline and regions (without limitation, Newcastle, Wollongong, Sydney and country areas).

9.2 Capital Contributions Database

AGLGN will maintain during the Access Arrangement Period a database that records the following information in relation to Capital Contributions made to AGLGN:

(a) the amount of a Capital Contribution made by a User in respect of a New Facility;

(b) the amount of any charge paid by a User which exceeds the Charge that would apply under a Reference Tariff for a Reference Service (or in relation to another Service under the Equivalent Tariff) where the excess is paid by the User in relation to the funding of a New Facility;

(c) the date that the Capital Contribution is made under paragraph (a) or the charge is paid under paragraph (b);

(d) the name of the User and the User's contact details; and

(e) a description of the New Facility in relation to which the Capital Contribution is made under paragraph (a) or the charge is paid under paragraph (b).

9.3 UAG

AGLGN will provide to the Relevant Regulator (within 4 months after 30 June in each year of the Access Arrangement period) a statement verified by an independent auditor engaged by AGLGN that contains, without limitation, the following information:

(a) the actual level of UAG on AGLGN's Covered Pipelines;

(b) the UAG charged to Users; and

(c) confirmation that UAG has been purchased by an open competitive tender each year.

SCHEDULE 1:
Definitions And Interpretations

In this Access Arrangement:

"**Access Arrangement Information"** means the separate information provided to the Relevant Regulator with the submission for this Access Arrangement.

"**Access Arrangement Period**" has the meaning given in the National Code. This refers to the period from when the Access Arrangement or revisions of the Access Arrangement take effect (by virtue of a decision pursuant to Section 2 of the National Code) until the next Revisions Commencement Date.

"**Additional Capacity"** means the additional capacity available for Local Network Capacity Reservation Service.

"AGLGN" means the owner from time to time of the Network which at the date of this document is AGL Gas Networks Limited ABN 87 003 004 322.

"**Annual Quantity"** means the annual consumption quantity for a Customer nominated by a User as adjusted by AGLGN in accordance with Section 3.1.1.2.

"Annual Unit Charge for Capacity" means the price for MDQ expressed in dollars per GJ of MDQ per annum set out in Section 3.

"Alternate Receipt Point" means a Receipt Point that is different to, but on the same Network section as the Principal Receipt Point.

"Authorised Overrun" means an Overrun approved before the Overrun occurs.

"Basic Metering Equipment" means the meter set at the Delivery Station comprising gas meters, filters, regulators, flow correctors, pipe work and isolation valves.

"**Bare Transfer"** means a transfer or assignment of any interest in the right to obtain a Service (including, but without limitation, a sub-licence) in which the contract between AGLGN and the User remains in effect in terms identical to those existing between AGLGN and the User immediately prior to that transfer or assignment.

"Business Day" means any day which is not a Saturday, Sunday or a public holiday in New South Wales.

"Capacity" has the meaning given in the National Code. This refers to the measure of the potential of a Covered Pipeline as currently configured to deliver a particular Service between a Receipt Point and a Delivery Point at a point in time.

"Capacity Reservation Service" means either or both of the transportation services described in Section 2.1.1 and 2.1.2.

"Capital Base" has the meaning given in the National Code. This refers to the value of the capital assets that form the Covered Pipeline.

"Capital Contribution" has the meaning given in Section 8.23 of the National Code.

"Capped Charge for MDQ" means the charge determined in accordance with Section 3.1.1.2.

"Capped Revenue" means the revenue as calculated in accordance with Section 3.1.1.2.

"Change in Tax Event" has the meaning given in Section 3.11.

"Charge" for a Service means the amount that is payable by a User for that Service under this Access Arrangement.

"Charge for Ancillary Services" means a charge determined in accordance with Section 3.15.

"Charge for MDQ" means the charge determined in accordance with Section 3.1 for Local Network Capacity Reservation Services and Local Network Managed Capacity Services or Section 3.3 for Trunk Capacity Reservation Services and Trunk Managed Capacity Services, as applicable.

"**Charge Number**" has the meaning given in Section 3.13.

"Contracted Capacity" has the meaning given in the National Code. This refers to that part of the Capacity which has been reserved by a User or Users pursuant to a contract entered into with AGLGN.

"Contract Carriage" has the meaning given in the National Code. This refers to a system of managing third party access whereby:

(a) AGLGN normally manages its ability to provide Services primarily by requiring Users to use no more than the quantity of Service specified in a contract;

(b) Users normally are required to enter into a contract that specifies a quantity of Service;

(c) Charges for use of a Service normally are based at least in part upon the quantity of Service specified in a contract; and

(d) A User normally has the right to trade its right to obtain a Service to another User.

"Contract Month" means the period beginning at 6:30am on the first Day of a calendar month and ending at 6:30am on the first Day of the next succeeding calendar month. Where the commencement date for the provision of a Service to a Delivery Point is not the first Day of a calendar month, the first Contract Month in respect of that Delivery Point shall be the period beginning at 6:30am on the first Day on which the Service is to be provided and ending at 6:30am on the first Day of the next succeeding calendar month and conversely where the last Day for a Service is not the last Day of a calendar month.

"Contract Year" means a period of 12 months commencing on the first Day of the Term (or the anniversary of that Day) for the Delivery Point.

"Corresponding Local Network Service" means a Local Network Service corresponding to the Trunk Reference Service for the Delivery Point under the Local Network Reference Service.

"Corresponding Trunk Service" means a Trunk Service corresponding to the Local Network Reference Service for the Delivery Point under the Local Network Reference Service.

"Cost of Service Approach" has the meaning giving in the National Code.

"Country Unit Charge" means a charge for MDQ expressed in dollars per GJ per annum set out in Section 3.1.1.

"Covered" has the meaning given in the National Code. A Pipeline or part of a Pipeline is covered if that Pipeline or that part of that Pipeline is subject to the provisions of the National Code under Sections 1.1, 1.13, 1.20 or 1.21 of the National Code.

"Covered Pipeline" has the meaning given in the National Code. This refers to, subject to Sections 2.3 and 2.4 of the National Code:

(a) the whole or a particular part of a Pipeline which is Covered; and

(b) any extension to, or expansion of the Capacity of, that Covered Pipeline which is to be treated as part of the Covered Pipeline in accordance with the Extensions/Expansions Policy contained in the Access Arrangement for the pipeline; and

(c) any expansion of that Covered Pipeline required to be installed under Section 6.22 of the National Code.

"CPI" means the All Groups Consumer Price Index that is the weighted average of the 8 capital cities as first published by the Australian Statistician.

"Current Service Agreement" has the meaning given to that term in Schedule 2B.

"Customer" means the end consumer of Gas. A customer includes any consumer of hot water in a residential unit where hot water is supplied through a centralised gas fired hot water system.

"Day" means a period of 24 consecutive hours beginning at 6.30am Australian Eastern Standard Time and **"Daily"** has a corresponding meaning. When referring to a particular Day, the date of the Day shall be the date on which that Day begins.

"Delivery Point" means a point at which gas is withdrawn from the Network.

"Delivery Station" means the facilities installed at a Delivery Point to enable delivery of gas from the Network including Measuring Equipment and which regulate the delivery and measure the quantity of gas withdrawn at that Delivery Point.

"Developable Capacity" has the meaning given in the National Code. This refers to the difference between the Capacity and the Capacity that would be available if additions of plant and/or pipeline were made, but does not include any extension of the geographic range of a Covered Pipeline.

"Embedded Network" means a distribution system or a pipeline not owned and operated by AGLGN, which receives gas from the Network.

"Embedded Network Operator" means the licensed owner or operator of an Embedded Network.

"Equivalent Tariff" has the meaning given in the National Code. This refers to, in relation to a Service that is not a Reference Service, the Tariff that it is reasonably likely would have been set as the Reference Tariff had the Service been a Reference Service.

"Final Decision" means the Final Decision by the Relevant Regulator on the Access Arrangement dated 29 April 2005.

"Final Decision 2000" means the Final Decision by the Relevant Regulator dated 21 July 2000.

"Fixed Charge" means a charge determined in accordance with Section 3.5.2.

"Force Majeure" means any event or circumstance not within the control of a party to a Service Agreement and which by the exercise of due diligence, that party is not reasonably able to prevent or overcome.

"Gas Balancing Charge" means any charge, settlement amount or gas purchase amount required under Schedule 3.

"Gas Market Company" means the Gas Market Company Limited, ACN 095 400 250.

"Gas Pipelines Access Law" means the Gas Pipelines Access (NSW) Act 1998.

"Gas Retail Market Business Rules" means the business rules for the retail market in New South Wales as approved by the Minister for Energy, whether under the *Gas Supply Act 1996 (NSW)* or such other business rules for the retail market in New South Wales to which AGLGN is a signatory.

"Gas Supply Act" means the Gas Supply Act 1996 (NSW).

"Gas Swap" means a Receipt Point Swap or a User Swap.

"**Gas Swap Service**" means the Gas Swap Service described in Section 2.7.

"**Gas Swap Transaction Charge**" means a charge determined in accordance with Section 3.9.

"General Terms and Conditions" means those terms and conditions set out in Schedule 2 in respect of Reference Services.

"**GJ**" means gigajoule.

"GST" has the meaning given to it in Division 195 of the A New Tax System (Goods & Services Tax) Act 1999."

"Hour" means any period of 60 consecutive minutes and "**Hourly**" has a corresponding meaning.

"Incentive Mechanism" has the meaning given in Section 8.44 of the National Code.

"Interconnection of Embedded Network Service" means the Service described in Section 2.8.

"Linepack" means the total quantity of gas in a Network Section from time to time.

"Linked Requests" means Requests, which are linked under Schedule 6.

"LN Zone" means Local Network zone.

"Local Network" means AGLGN's distribution system in New South Wales, including the Central West distribution system, consisting of a system of pipes and associated facilities including Receipt Station components, Delivery Station components and Measuring Equipment, but excluding the Trunk Sections.

"Local Network Receipt Point" means:

- in the Wilton-Newcastle Network Section – the Trunk Exit Zone applicable to the Delivery Point;
- in the Wilton-Wollongong Network Section – the Trunk Exit Zone or point of connection between the Eastern Gas Pipeline and the Local Network at Port Kembla; and
- in other Network Sections – pressure reduction stations connected to a pipeline owned by a person other than AGLGN.

"Local Network Unit Charge" means a charge for MDQ expressed in dollars per GJ per annum set out in Section 3.

"Managed Capacity Service" means either or both of the transportation services described in Sections 2.2.1 and 2.2.2.

"Maximum Daily Quantity" or **"MDQ"** means the maximum quantity of gas (in GJ's) which AGLGN is obliged to transport and deliver to a particular Delivery Point on behalf of the User on any Day (excluding Overruns).

"Maximum Hourly Quantity" or **"MHQ"** means the maximum quantity of gas (in GJ's) which AGLGN is obliged to transport and deliver to a particular Delivery Point on behalf of the User in any Hour (excluding Overruns).

"Measuring Equipment" means all the equipment and facilities forming part of a Delivery Station or a Receipt Station required to measure and communicate the quantity of gas delivered to or at the Delivery Point or Receipt Point.

"Meter Data Service" means the Meter Data Service described in Section 2.6.

"Meter Reading Charge" means a charge determined in accordance with section 3.7.

"Month" means calendar month.

"Multiple Delivery Point Service" means either or both of the transportation services described in Section 2.4.

"National Code" means the National Third Party Access Code for Natural Gas Pipelines Systems referred to in the Gas Pipelines Access Law.

"Negotiated Service" means a service for the transportation of gas on terms and conditions different to those of a Reference Service.

"Network" means AGLGN's system of pipes and associated facilities including Receipt Station components, Delivery Station components and Measuring Equipment.

"Network Code" means the network code adopted from time to time by AGLGN under its reticulator's authorisation.

"Network Section" means Wilton-Newcastle Network Section, Wilton-Wollongong Network Section, or a country sub-network served by a particular Local Network Receipt Point.

"New Facility" is defined in the National Code. This refers to:

(a) any extension to, or expansion of the Capacity of, a Covered Pipeline which is to be treated as part of the Covered Pipeline in accordance with the Extensions/Expansions Policy contained in this Access Arrangement for that Covered Pipeline; and

(b) any expansion of the Capacity of a Covered Pipeline required to be installed under Section 6.22 of the National Code.

"New Facilities Investment" is defined in the National Gas Code. This refers to the amount of the actual capital cost incurred.

"NSW Code" means the Third Party Access Code for Natural Gas Distribution Networks established by Ministerial Order on 18 April 1997 pursuant to Section 31 of the Gas Supply Act.

"Nominated Delivery Point" means a Delivery Point on the Corresponding Local Network Reference Service nominated under a Trunk Service.

"Non-Tariff Delivery Point" means any Delivery Point where the Customer is reasonably expected to take delivery of a quantity of gas exceeding 10TJ per Contract Year.

"Non-Tariff Services" means the transportation services described in Sections 2.1 to 2.4.

"Overrun" means the withdrawal of a quantity of gas in excess of the MHQ in any Hour or in excess of the MDQ on any Day.

"Overrun Charges" means the charges as described in 3.13.

"Pipeline" means has the meaning given in the Gas Pipelines Access Law.

"**POTS**" means packaged off take station.

"**Previous Maximum Quantity**" means the maximum quantity metered at the Delivery Point on any Day in the twelve months ending 2 months prior to the date on which the Managed Capacity Service commences.

"Pressure Reduction Unit Charge" means a charge expressed in dollars per GJ of MDQc per annum set out in Section 3.1.1.2.

"Principal Receipt Point" means, in the context of a Gas Swap Service, the Receipt Point specified in a Service Agreement for a Trunk non-tariff Reference Service.

"Prospective User" has the meaning given in the National Code. This refers to a person who seeks or who is reasonably likely to seek to enter into a contract for a Service and includes a User who seeks or may seek to enter into a contract for an additional Service.

"Provision of Basic Metering Equipment Charge" means a charge determined in accordance with Section 3.1.2 in respect of Services relating to Non-Tariff Delivery Points or Section 3.5.3 in respect of Services relating to Tariff Delivery Points, as applicable.

"Provision of On-Site Data and Communication Equipment Charge" means a charge determined in accordance with Section 3.8.

"**Queuing Policy**" has the meaning given in Section 3.12 of the National Code.

"Receipt Point" means a Trunk Receipt Point or a Local Network Receipt Point.

"Receipt Point Swap" means a transaction under Gas Swap Service in which AGLGN receives gas at an Alternate Receipt Point for transportation through the Network from the Principal Receipt Point. A Receipt Point Swap may include a transfer of title between the Transferor of Gas and the Recipient of Gas at the Principal Receipt Point.

"Receipt Station" means the facilities installed at a Receipt Point to enable receipt of gas from a User into the Network.

"**Recipient of the Gas**" means a User who receives title to gas from another User through a Receipt Point Swap or User Swap.

"Reference Service" means the:

(a) Capacity Reservation Service;

(b) Managed Capacity Service;

(c) Throughput Service;

(d) Multiple Delivery Point Service;

(e) Tariff Service;

(f) Meter Data Service; or

(g) Gas Swap Service.

"Reference Service Agreement" means a Service Agreement in respect of a Reference Service or, where the context requires, any or all of those Services.

"Reference Tariff" means a tariff, which relates to a Reference Service**.**

"Regulatory Event" has the meaning given in Section 3.11.

"Relevant Regulator" has the same meaning as in the Gas Pipelines Access Law and at the commencement of this Access Arrangement is the Independent Pricing and Regulatory Tribunal of New South Wales.

"Relevant Quantity" means an amount calculated in accordance with Section 3.13.

"Relevant Tax" means any Tax other than:

(a) any tax in the nature of an income tax or a capital gains tax;

(b) penalties, charges, fees and interest on late payments, or deficiencies in payments, relating to any Tax;

(c) stamp duty, or similar taxes and duties; and

(d) any Tax that replaces or is the equivalent of or similar to any of the taxes referred to above.

"Request" means a Request for Service as described in Schedule 6.

"Retrospective Date" has the meaning given in Section 2.1.1.

"**Revisions Commencement Date**" has the meaning given in Section 3.17 of the National Code.

"**Revisions Submission Date**" has the meaning given in Section 3.17 of the National Code.

"Service" means a service provided by AGLGN in relation to the Network including but not limited to Reference Services.

"Service Agreement" means a Reference Service Agreement or a Negotiated Service Agreement, or where the context requires, both.

"Short-Term Capacity" means the Short-Term capacity referred to in the Local Network Capacity Reservation Service.

"Short-Term Capacity Charge" means a charge determined in accordance with Section 3.1.3 in respect of Local Network Capacity Reservation Services, or Section 3.3.2 in respect of Trunk Capacity Reservation Services, as applicable.

"Specifications" means the specifications for gas in Schedule 5.

"Substituted Transfer" means a transfer or assignment of any interest in the User's right to obtain a Service (including, but without limitation, an assignment) in which the contract between AGLGN and the User either does not remain in effect or remains in effect with terms not identical to those existing between AGLGN and the User immediately prior to that transfer or assignment.

"Summer Tranche Capacity" means the summer tranche capacity referred to in the Local Network Capacity Reservation Service.

"TRS" means trunk receiving station.

"Tariff", for a Service, is defined in the National Code. This refers to the criteria that, when applied to a User's characteristics and requirements, determine the charge that is payable by that User to AGLGN.

"Tariff Customer" means a person who is reasonably expected to take delivery of less than 10TJ of gas per year.

"Tariff Delivery Point" means a Delivery Point at which the Customer is a Tariff Customer.

"Tariff Service" means the either or both of the transportation services described in Sections 2.5.1 and 2.5.2.

"Tariff User" means a User taking a Tariff Service.

"Tax" means any royalty (whether based on value, profit or otherwise), tax, duty, excise, levy, fee, rate or charge imposed from time to time during the term of this Access Arrangement by any government or any governmental, semi-governmental or other body authorised by law to impose that tax on or to:

(a) the Network (or any of its components);

(b) the operation of the Network; or

(c) the provision of Services by AGLGN.

"Term" means, unless otherwise agreed, the period specified in the Services Agreement for a Delivery Point.

"Throughput Charge" means a charge determined in accordance with Section 3.2.1 in respect of Local Network Throughput Services, Section 3.4 in respect of Trunk Throughput Services or Section 3.5.1 in respect of Local Network Tariff Services, as applicable.

"Throughput Service" means either or both of the transportation services described in Sections 2.3.1 and 2.3.2.

"TJ" means terajoule.

"Total Revenue" has the meaning given in Section 8.2 of the National Code.

"**Transferor of the Gas**" means a User that transfers its title to gas to another User through a Receipt Point Swap or User Swap.

"Trunk" means all of the Trunk Sections.

"Trunk Capacity Reservation Service" means the Capacity Reservation Service for the Trunk described in Section 2.1.2.

"**Trunk Entry Zone**" means any point where a User's Receipt Point is located.

"Trunk Exit Zone" means any point at which gas is delivered from the Trunk to the Local Network. (In respect of the Wilton-Newcastle and Wilton-Wollongong Network Sections, the areas served by each Trunk Exit Zone are shown in the Table in Section 3.3 and/or in Schedule 7).

"Trunk Managed Capacity Service" means the Managed Capacity Service for the Trunk described in Section 2.1.2.

"Trunk Receipt Point" means any point at which gas is received into the Trunk.

"**Trunk Tariff Service"** means the Tariff Service for the Trunk described in Section 2.5.2.

"Trunk Tariff Service Charge" means a charge determined in accordance with Section 3.6.

"**Trunk Throughput Service"** means the Throughput Service for the Trunk described in Section 2.3.2.

"Trunk Section" means pipelines being the Wilton-Wollongong Trunk Section and the Wilton-Newcastle Trunk Section.

"**Trunk Zone**" means the zones identified in the diagram set out in Schedule 7.

"Unaccounted for Gas" or "**UAG**" means gas necessary to make up for gas lost or unaccounted for in the Network.

"Unauthorised Overrun" means an Overrun which is not approved by AGLGN before it occurs.

"User" means a 'System User' as that term is defined in the Gas Supply Act (or any other definition which supersedes that term which defines the eligibility of a person to obtain third party access to the Network).

"User Swap" means a transaction under a Gas Swap Service in which title to gas is transferred from the Transferor of Gas to the Recipient of Gas after the gas has been delivered to the Network at the Principal Receipt Point of the Recipient of the Gas.

"**Wilton-Newcastle Network Section**" means the Wilton-Newcastle Trunk Section and those parts of the Local Network supplied from the Wilton-Newcastle Trunk Section.

"**Wilton-Newcastle Trunk Section**" means the transmission pipeline being that part of the Network being the pipe system which extends from Wilton to the TRS at Kooragang Island in Newcastle and supplying TRS's at Appin, Campbelltown, Eastern Creek, West Hoxton, Horsley Park, Plumpton, Windsor, Gosford, Warnervale, Wyong, and Hexham, and POTS at Appin, Morisset, Maroota, Minmi and Wyee and such other TRSs and POTS as may be installed from time to time.

"**Wilton-Wollongong Network Section**" means the Wilton Wollongong Trunk Section and that part of the Local Network supplied from the Wilton-Wollongong Trunk Section.

"**Wilton-Wollongong Trunk Section**" means transmission pipeline being that part of the Network being the pipe system which extends from Wilton to the TRS at Mount Keira and then to Cordeaux Heights in Wollongong;

"Year" means a period of 365 consecutive Days but, for any Year which contains a date of 29 February, means 366 consecutive Days.

Interpretation

In the construction of the Access Arrangement, unless the context otherwise requires:

(a) a reference to a clause or a schedule is to a clause in, or schedule to, the Access Arrangement;

(b) the singular includes the plural and vice versa;

(c) references to any statute, regulations, or other statutory instrument, standard or by-laws shall be deemed to be references to the statute, regulation, statutory instrument, standard or by-law as from time to time amended, consolidated, re-enacted or replaced including substituted provisions that substantially correspond to those referred to;

(d) references to any agreement, deed, instrument, or publication shall be deemed to be references to the agreement, deed, instrument or publication as from time to time amended, supplemented, novated or replaced;

(e) clause or condition headings are inserted for convenience only and do not affect the interpretation of the Access Arrangement;

(f) expressions referring to writing will be construed as including references to words printed, type-written, telexed, lithographed, facsimiled or otherwise traced, copied or reproduced;

(g) references to 'dollars' and '$' are references to Australian dollars;

(h) a reference to a Party includes a reference to its successors in title and permitted assigns;

(i) an agreement, representation or warranty on the part of two or more persons binds them jointly and severally or if given in favour of two or more persons may be enjoyed by them jointly or severally or jointly and severally;

(j) when referring to a particular Day, the date of the Day shall be the date on which that Day begins; and

(k) the words “include”, “including”, “for example” or “such as” are not used as, nor are they to be interpreted as, words of limitation, and, when introducing an example, do not limit the meaning of the words to which the example relates to that example or examples of a similar kind.

SCHEDULE 2A:
Terms And Conditions Applicable To All Reference Services

General

1. The General Terms and Conditions in this Schedule 2A apply to all Reference Services. The General Terms and Conditions in Schedule 2B apply to all Reference Services except Tariff Reference Services.

2. Additional terms and conditions for each Reference Service are set out in Section 2:

(a)	Capacity Reservation Service	Section 2.1
(b)	Managed Capacity Service	Section 2.2
(c)	Throughput Service	Section 2.3
(d)	Multiple Delivery Point Service	Section 2.4
(e)	Tariff Service	Section 2.5
(f)	Meter Date Service	Section 2.6
(g)	Gas Swap Service	Section 2.7

3. The gas balancing arrangements set out in Schedule 3 apply to all Reference Services.

4. The operational principles set out in Schedule 4 apply to all Reference Services.

Reference Services Agreement

5. A User is required to enter into a Reference Services Agreement with AGLGN for a Service, before being given access to the Reference Service.

6. AGLGN and a User must perform their obligations under a Reference Service Agreement, and conduct their relations with each other, in a commercially reasonable manner, and in accordance with reasonable operating and management practices.

7. AGLGN may amend the terms and conditions set out in a Reference Service Agreement to reflect changes to:

   (a) the Gas Market Business Rules, to the extent the changes are consistent with this Access Arrangement; or

   (b) other applicable laws.

Right to access

8. AGLGN will not discriminate between Prospective Users in the provision of Services on the basis of:

   (a) past transactions or relationships with AGLGN;

(b) the identity of the Prospective User, except that AGLGN may require different amounts of security under Schedule 2A clauses 10.1 and 10.2, taking into account, amongst other things, the User's credit record and past transactions and relationships with AGLGN or other parties;

(c) the fact that the Prospective User is a related party of AGLGN; or

(d) the source of the gas proposed to be transported, subject only to the gas meeting the Specifications, and the User having suitable arrangements in place to monitor and control the quality of the gas.

Obligation to Transport

9. AGLGN's obligation to transport gas will consist of:

(a) the receipt of gas at the Trunk Receipt Point or Local Network Receipt Point (whichever is relevant); and

(b) the delivery of a thermally equivalent quantity of gas at the Local Network Receipt Point or the Delivery Point (whichever is relevant) up to a maximum of the MHQ in any Hour, subject to the aggregate deliveries from all Users on a Day being equal to the aggregate withdrawals by all Users on that Day.

Security for payment

10.1. A User must, on request by AGLGN:

(a) pay all amounts owing under a Service Agreement to continue to receive Services under that Service Agreement;

(b) demonstrate its ability to meet all financial obligations under a Service Agreement;

(c) provide all information reasonably required by AGLGN for the purpose of assessing the User's credit worthiness. The User will provide the information in a timely manner; and

(d) provide AGLGN with security for the performance of the User's obligations under a Service Agreement.

10.2. The amount and form of security requested by AGLGN must comply with the following:

(a) the amount of any security will be determined by AGLGN with regard to the User's credit rating, payment history and any additional factors which, in AGLGN's reasonable opinion, may have a material effect on the User's ability to perform any of its obligations under the service agreement or upon AGLGN's ability to recover any amounts payable or to be payable by the User;

(b) the amount of security shall be proportionate to the charges under the Service Agreement; and

(c) the type of security shall be one or a combination of the following:

i) a refundable deposit, or bank guarantee;

ii) if AGLGN agrees (in its sole discretion), a parent company guarantee; or

iii) such other form of security as agreed between the User and AGLGN,

which must be in a form satisfactory to AGLGN.

Gas Pressure

11. The User must deliver gas at the Receipt Point within the pressure range set out in Schedule 8: Receipt Point Pressures, or as nominated from time to time by AGLGN.

Responsibility for Gas and Unaccounted for Gas

12.1. AGLGN is responsible for gas while the gas is in its control. AGLGN will replace gas lost while in its control, and will purchase such gas through a competitive tender each year.

12.2. Notwithstanding the provisions set out in clause 12.1, if an alternative arrangement is provided for by the Gas Market Company or under an equivalent scheme which AGLGN is a participant in, and AGLGN approves the alternative arrangements, then AGLGN's obligations under clause 12.1 of Schedule 2A and Part 3E Section 3.11.2 will be reduced to the extent that those obligations are assumed by others. AGLGN's approval will be subject to the alternative arrangement meeting AGLGN's reasonable technical and commercial requirements and being reflected in the Services Agreement for each User. Nothing in this clause prevents AGLGN varying Reference Tariffs under Part 3E Section 3.11.2 with respect to Unaccounted for Gas purchased by AGLGN either before or after the date of enactment of the alternative arrangements.

Overruns

13. An Overrun will occur if withdrawals at a Delivery Point (and Nominated Delivery Point) exceed the MDQ in any Day or MHQ in any Hour.

14. An Overrun approved before the event by AGLGN is an Authorised Overrun.

15. A User may request an Authorised Overrun on giving one Business Day's notice to AGLGN.

16. The User and AGLGN must agree the overrun quantity for MDQ and MHQ (such agreed Quantity is the "Authorised Overrun Quantity" in respect of each) and the Day or Days and/or Hour or Hours, on which the Authorised Overrun Quantity will be transported and/or delivered.

17. If the withdrawals at a Delivery Point (and Nominated Delivery Point):

    (a) on a Day exceed the sum of the MDQ for the Delivery Point or Local Network Receipt Point and any authorised Overrun Quantity for MDQ for the Day; or

    (b) in any Hour exceed the MHQ and any Authorised Overrun Quantity for MHQ for the Hour

    then an Unauthorised Overrun will have occurred and the excess will be an Unauthorised Overrun Quantity.

18. Users under a Throughput Service, Managed Capacity Service or Tariff Service are not liable to pay charges under Section 3 in respect of Overruns.

19. Users will be liable for and indemnify AGLGN against any loss, liability or expense suffered or incurred by AGLGN as a result of any Unauthorised Overrun.

20. Where a Delivery Point is served under two or more Service Agreements, an Overrun is deemed to occur where withdrawals at that Delivery Point exceed the total for all Service Agreements of MDQ in any Day or MHQ in any Hour. Where an Overrun occurs:

    (a) an Overrun will have occurred under each Service Agreement; and

    (b) the Overrun quantity will be apportioned between the Service Agreements proportionately according to MDQ.

Metering

21. Withdrawals at Delivery Points will be metered by Basic Metering Equipment provided by AGLGN.

22. The User will use reasonable endeavours to provide AGLGN with clear and safe access to each Delivery Point and Measuring Equipment. AGLGN may enter a Delivery Point to obtain access to Measuring Equipment.

23. If the User does not provide AGLGN with access to a Delivery Point or Measuring Equipment, AGLGN may estimate the quantity of gas withdrawn, cease providing the Service after 6 hours written notice, and/or relocate the Measuring Equipment at the User's expense.

24. If Measuring Equipment fails to operate, the quantity of gas withdrawn will be determined by agreement, or failing agreement by successively using a check meter, calculating the percentage error through calibration tests or mathematical calculation and varying the quantity by one half of the error, or by a deeming method.

25. The quantity of gas delivered at the Delivery Point will be a product of the volume and the average heating value or values declared by AGLGN for the Network Section which includes the Delivery Point or as otherwise agreed.

26. If :

(a) AGLGN ceases to offer Meter Data Services, or any elements thereof, as a Reference Service, and AGLGN does not offer to provide, or the User does not take, a meter data service; or

(b) either party terminates the Meter Data Services, on the enactment of provisions under the Gas Retail Market Business Rules that permits the provision of meter reading or on site data and communication by a person other than AGL,

the User is required to provide details of the meters and meter readings to AGLGN in a format and timetable acceptable to AGLGN.

Allocation

27. Where gas is delivered to a Delivery Point for more than one User or under more than one Service, the User or Users must establish allocation methodologies and notification processes reasonably acceptable to AGLGN. If no such methodologies or processes are established, AGLGN will be entitled to adopt a reasonable methodology such as pro-rating based on MDQ to determine the allocation of the gas between Users or between Services.

New Receipt Points and Receipt Stations

28. The User must ensure that there is a Receipt Station at any Receipt Point established after 1 July 2005, immediately upstream of any connection to the Network.

29. AGLGN's requirements include that the design must conform with the technical requirements for such facilities as published from time to time by AGLGN, which requirements will be in accordance with good industry practice for this type of facility and conform to appropriate Australian and internationally recognised standards and codes (including AS2885). The Receipt Station will comprise a filtration and liquid separation system, gas quantity measurement facilities, a flow and pressure control system and, if AGLGN reasonably requires, gas quality measurement facilities.

30. AGLGN will require Receipt Station specifications comprising design, operation and maintenance principles to be submitted to AGLGN for written approval prior to installation. A minimum of four (4) weeks must be allowed for the AGLGN approval process from the time of submission.

31. AGLGN may, upon reasonable notice to a User, operate the pressure and flow control facilities at any Receipt Station which is not owned by AGLGN. A User must have contractual arrangements in place with the owner of the Receipt Station to allow AGLGN to exercise this right.

32. AGLGN may require Users of a new Receipt Point to pay the costs reasonably incurred by AGLGN in modifying any part of its Network, and/or installing any systems required to enable the new Receipt Point to be established and integrated into the operation of the Network which AGLGN has not recovered from the party who established the Receipt Point.

Alterations to Receipt Point and Receipt Stations

33. AGLGN may require Users to make alterations to, or install additional equipment at, a Receipt Station for the purpose of achieving upgraded measurement performance, or accommodating changes in Gas demand characteristics, only to the extent that the alterations are in accordance with good industry practice and/or appropriate Australian and internationally recognised standards and codes.

34. AGLGN may require Users to pay for the costs reasonably incurred by AGLGN in altering, or adding equipment to any part of the Network for the purposes of measuring or improving the measuring of gas quality at a Receipt Point.

Delivery Points and Delivery Stations

35. It is the intention that each Delivery Point will contain only one Delivery Station. AGLGN may in its discretion agree to a request from a User for an additional Delivery Station.

36. Delivery Stations will generally be owned by AGLGN except for some facilities which are not integral to the transportation of gas.

37. If a particular Customer's site was connected to the Network as at the date of the 1997 Access Undertaking, and was being served at that time through more than one Delivery Station, then the Delivery Point may consist of any or all of those Delivery Stations.

Accounts and Payments

38. AGLGN will render invoices at regular intervals but not less frequently than monthly.

39. AGLGN may charge interest on amounts which are not paid within 14 days of the date of the account.

Force Majeure

40. Where an event of Force Majeure affects or prevents a party's performance under a Service Agreement, the non-performance will not be a breach of the Service Agreement but the party affected by the Force Majeure must use reasonable endeavours to put itself in a position to perform its obligations.

41. An event of Force Majeure will not relieve a party from its obligations under a Service Agreement after the expiry of a reasonable period of time within which the Force Majeure could have been remedied or overcome had reasonable endeavours been exercised by the party affected.

42. An event of Force Majeure will not relieve a party from any obligations under a Service Agreement unless, promptly after becoming aware of the Force Majeure the party affected gives written notice to the other party.

43. If an event of Force Majeure continues to prevent a party from performing its obligations under the Service Agreement for a year the parties shall consult in good faith to resolve the Force Majeure. If they are unable to agree, either

party may terminate the Service Agreement. Both parties will be relieved of any future obligations but not relieved of obligations arising prior to termination.

44. Where there is a charge based on MDQ, and AGLGN is unable to perform its obligations under a Service Agreement due to an event of Force Majeure occurring within the Network, the charge will be based on the actual amount withdrawn during that period (up to MDQ) rather than MDQ.

45. Clauses 40 to 44 do not apply to:

(a) a party's failure to pay money; or

(b) a User failing to ensure that gas delivered to a Receipt Point meets the Specifications.

Suspension of supply

46. The User may request AGLGN to stop or suspend the delivery of gas to a Delivery Point under a Service and AGLGN must, at the later of:

(a) the earliest reasonably practical date after receipt of written notice from the User; and

(b) the date requested by the User,

stop or suspend the delivery of gas to a Delivery Point nominated in the notice. The suspension will not relieve the User from its obligations to pay for the Service.

47. If requested by AGLGN, a representative of the User must be present when AGLGN stops or suspends the delivery of gas to the Delivery Point.

48. AGLGN may suspend the delivery of gas to a Delivery Point if:

(a) the User does not or is unable to deliver sufficient gas to the Receipt Point to meet the User's withdrawal requirements (taking any gas balancing adjustments into account);

(b) the User has not ceased taking gas at a Delivery Point or the delivery of gas to a Receipt Point if notified to do so;

(c) the User is not a member of a scheme for the operation of the natural gas retail market in New South Wales approved by the Minister for Energy (approved scheme); or

(d) AGLGN is requested by the manager of an approved scheme to suspend the delivery of Gas to the Delivery Point.

49. AGLGN is entitled to charge the User for costs reasonably incurred by AGLGN for stopping or suspending the delivery of gas at the User's request.

50. If AGLGN, suspends the Services in accordance with this Access Arrangement, AGLGN will not be liable to the User or to the User's Customer's for any losses, liabilities and expenses incurred by the User arising out of or in connection to that suspension. The User will be liable for and indemnify AGLGN against any claims made by any third party (including against the User) arising out of AGLGN's actions to suspend supply of gas.

Interruptions of Supply

51. AGLGN may, without being in breach of the Services Agreement, interrupt or reduce the delivery of gas to a Delivery Point for the purpose of undertaking repairs, tests, upgrades or maintenance of the Network, upon giving the User reasonable notice prior to the scheduled interruption or reduction of delivery of gas.

52. AGLGN may, without being in breach of the Services Agreement, interrupt or reduce the delivery of gas to a Delivery Point, without prior notice to the User, in cases of emergency or risk of injury to persons or damage to property for such period as AGLGN believes is necessary.

Liabilities and Indemnities

53. Unless otherwise provided in this Access Arrangement, the following clauses 54 to 60 shall regulate all liability of AGLGN and the User arising in relation to any act, omission or event arising out of this Access Arrangement.

54. All express or implied warranties, representations or covenants which are not contained in this Access Arrangement are excluded to the maximum extent permitted by law. If a condition or warranty is implied into this Access Arrangement under the Trade Practices Act 1974 (Commonwealth) or any equivalent State or Territory legislation that cannot be excluded, then AGLGN's liability to the User for breach of the condition or warranty is limited to (at AGLGN's option):

    (a) the re-supply of the relevant service under this Access Arrangement; or

    (b) the payment of having the relevant service re-supplied.

55. A party (the 'First Party') shall not be liable to the other party (the 'Second Party') whether in contract, tort, statute or otherwise for or in respect of any consequential loss arising out of this Access Arrangement, including:

    (a) loss of revenue;

    (b) economic loss;

    (c) loss of profits;

    (d) loss of business opportunity or business interruption;

    (e) claims of third parties;

    (f) loss of reputation;

    (g) punitive or exemplary damages; or

    (h) costs or expenses associated with or incidental to any of the above.

56. The liability of the First Party to the Second Party is limited to loss or damage suffered by the Second Party arising from:

    (a) personal injury to the Second Party's employees, agents or contractors arising from the First Party's acts or omissions under this Access Arrangement;

    (b) damage to the Second Party's property arising from the First Party's acts or omissions under this Access Arrangement; or

(c) any breach of this Access Arrangement by the First Party which causes that loss or damage.

57. The User shall include in all its supply arrangements with persons who are provided with gas arising out of this Access Arrangement, a provision that limits or excludes the User's liability to those persons, to the extent reasonably practicable, and in particular in relation to transportation of gas.

58. The First Party will indemnify and keep indemnified the Second Party, its employees and agents against any loss which the Second Party suffers or incurs as a result of or in connection with any claim by a third party arising out of or in connection with:

(a) any personal injury to the Second Party's employees, agents or contractors arising from the First Party's acts or omissions under this Access Arrangement;

(b) any damage to the Second Party's property arising from the First Party's acts or omissions under this Access Arrangement; or

(c) any breach of this Access Arrangement by the First Party which causes that loss or damage.

59. The limitations on claims, damages and liability referred to in clauses 55 and 56, do not apply in respect of loss resulting from or associated with:

(a) delivery of non-Specification gas into the Network by or on behalf of a User;

(b) delivery of non-Specification gas to a Delivery Point by AGLGN, unless the delivery of non-Specification gas to a Delivery Point is due to a User or their agent delivering non-Specification gas into the Network;

(c) failure by the User to cease delivery or taking of gas as required under the Service Agreement;

(d) withdrawal at a Delivery Point or a Local Network Receipt Point of a quantity greater than MHQ in any Hour or a quantity greater than MDQ on any Day except as an Authorised Overrun; or

(e) any action or omission of a User or their agent regarding the installation, operation, maintenance or removal of Measuring Equipment.

60. The liability of AGLGN and the User to one another under clauses 53 to 59 inclusive is reduced to the extent to which the liability is caused or contributed to by either AGLGN or the User.

Emergency Contact Information

61. The User must ensure that at all times AGLGN has accurate emergency contact information for the User and for the Customer at each Delivery Point.

Title to Gas

62. The User will warrant that it has title to gas delivered into the Network by it or on its behalf. From time to time, AGLGN may request the User provides satisfactory evidence that the User has title to gas at any Receipt Point and that the quantities of gas which the User is entitled to have delivered to the Receipt

Point are consistent with the quantities of gas that the User is required to have delivered to the Receipt Point under gas balancing arrangements applying to that Receipt Point.

63. AGLGN is entitled to co-mingle the gas in the Network.

Gas Quality

64. The User must deliver gas at the Receipt Point which meets the Specification and, subject to the User complying with this requirement, AGLGN will ensure that gas delivered at the User's Delivery Points meets the Specification.

65. AGLGN may direct the User to cease the delivery of gas which does not meet the Specification, or may refuse to accept such gas and give notice to the User accordingly.

66. From time to time, AGLGN may require the User to demonstrate that it has contractual arrangements in place to prevent gas which does not meet the Specification being delivered into the Network. From time to time, AGLGN may require the User to provide facilities to enable AGLGN to monitor the quality of gas at any point where gas is introduced into the system of pipes through which it is delivered into the Network.

67. Where gas quality is measured upstream of the Network the User must comply with gas testing provisions prescribed by any law applying during this Access Arrangement (including, but not limited to, provisions applying to AGLGN). Such a law may include, without limitation, any regulation made under the Gas Supply Act. For any period during this Access Arrangement where there is no such law in place, the User must satisfy or caused to be satisfied, the gas testing provisions as determined by AGLGN from time to time.

68. The User acknowledges that gas delivered by or on behalf of the User to a Receipt Point will enter into the Network in close proximity to and will be available for use by a large number of persons, and that its failure to ensure that gas delivered at any Receipt Point meets the Specification may result in those persons suffering damage.

Breach of Agreement

69. Breach of a Local Network Reference Service Agreement or Trunk Reference Service Agreement will be deemed to be a breach of the corresponding Trunk Reference Service Agreement or corresponding Local Network Reference Service Agreement as the case may be.

Commencement and Termination of Agreement

70. Termination of a Local Network Reference Service Agreement or Trunk Reference Service Agreement will terminate the corresponding Trunk Reference Service Agreement or corresponding Local Network Reference Service Agreement as the case may be.

71. The commencement date for the Trunk Reference Service Agreement will be the commencement date of the corresponding Local Network Reference Service Agreement.

SCHEDULE 2B:
Additional Terms And Conditions Applicable To Reference Services Except Tariff Reference Service

MDQ and MHQ

1. At the commencement of a Service Agreement, the User will specify an MDQ for each Delivery Point (subject to any right the User has to Summer Tranche Capacity or Short-Term Capacity under Section 2) that is to apply for the whole of the Term for that Delivery Point.

2. Except as an Authorised Overrun, AGLGN will not be obliged to deliver at any of the User's Delivery Points or Local Network Receipt Points a quantity of gas greater than the MDQ for that Delivery Point, or MHQ in any Hour.

Extension of Term

3. A User is entitled to continue to receive the Services to the Delivery Point and Local Network Receipt Point after the expiry of the Term if:

   (a) the Term of the Service expires on or before the Revisions Commencement Date; and

   (b) the User gives AGLGN at least four weeks notice prior to the expiry of the Term requesting an extension of the Term.

4. If the Term of the Services expires after the Revisions Commencement Date, the User is not entitled to continue to receive the Services to the Delivery Point and Local Network Receipt Point after the expiry of the Term, unless the User enters into a Services Agreement with AGLGN effective from the date the Term of the Services expires under the preceding Services Agreement. An application by a User for Services contemplated under this clause 4 will not be subject to the Queuing Policy.

5. If the requirements of clause 3 are satisfied, the User shall be entitled to continue to receive the Services for a further term[44] at a capacity not exceeding the MDQ and MHQ applying under the Service Agreement at the expiry of the Term (excluding any Short-Term Capacity or Summer Tranche Capacity) at the Reference Tariffs payable under the Access Arrangement in force from time to time during such further term. In respect of a Managed Capacity Service, if the maximum quantity metered at the Delivery Point in the 12 months ending 2 months prior to the expiry of the Term is greater than the MDQ, then the User shall be entitled to receive a Capacity Reservation Service, but may request a Managed Capacity Service in accordance with Schedule 6.

6. Where the MHQ at a Delivery Point is more than one tenth of the booked MDQ, and AGLGN gives the User at least 12 weeks notice prior to expiry of the Term that a queue has been formed, or is likely to be formed during the following Term, the User is not entitled to continue to receive the Services to the Delivery Point. AGLGN may agree to continue to provide the Services after the expiry of

[44] The length of term will be nominated by the User when requesting an extension of the term under clause 3(b), subject to any minimum, maximum or specified term as set out in the Access Arrangement for a Capacity Reservation Service, Managed Capacity Service or Throughput Service, as applicable, to that Delivery Point.

the Term, to the Delivery Point on reasonable commercial and/or technical grounds, including, the installation of demand management devices by the User which are acceptable to AGLGN.

7. Unless the User has notified AGLGN, at least four weeks prior to the expiry of the Term that:

   (a) AGLGN is to cease delivering gas to a Delivery Point to that Delivery Point from the expiry of the Term; or

   (b) the User wishes to exercise its rights under clause 3 above,

   AGLGN will be entitled but not obliged to continue to deliver gas to that Delivery Point on the basis that:

   (a) the Term for that Delivery Point will be deemed to have been automatically extended by 12 months from the date which would otherwise have been the expiry date; and

   (b) the type of service and MDQ for that Delivery Point will continue unchanged.

Deletion of Delivery Points

8. If, prior to the expiry date of a Delivery Point in a Service Agreement ("Current Service Agreement"):

   (a) AGLGN enters into another service agreement with a person other than the User for delivery of gas to the same Delivery Point; and

   (b) AGLGN is satisfied that the service to that other person is for the same tranche of capacity as is provided to the User under the Current Service Agreement;

   the User may request that the Delivery Point be deleted from the Schedule in the Current Service Agreement.

9. AGLGN must delete the Delivery Point with effect from the later of the date nominated by the User, and the commencement of the term of the Delivery Point under the service agreement with the other person.

10. Notwithstanding the deletion of the Delivery Point, the User remains liable to pay charges for that Delivery Point until the expiry date of the Delivery Point under the Current Service Agreement.

11. The User's entitlement to information concerning the Delivery Point will cease from the date of deletion.

12. After the expiry date of the Delivery Point under the Current Service Agreement, the User is entitled to a refund of amounts paid to AGLGN with respect to the Delivery Point for the period following its deletion, until the expiry date of the Delivery Point, provided that the amount of any refund will not exceed the amount payable by the other person with respect to that Delivery Point over the same period.

13. Alternatively, at the time of deletion, the User may pay AGLGN an amount (as reasonably estimated by AGLGN) by which the charges payable by the other

person are expected to fall short of the amounts payable by the User between the date of deletion and the expiry date under the Current Service Agreement.

14. If the User pays the amount estimated by AGLGN under clause 13:

(a) no further charges will be payable by the User in respect of that Delivery Point beyond the date of deletion; and

(b) the User will not be entitled to any refund after the expiry date of the Delivery Point under the Current Service Agreement.

SCHEDULE 3:
Gas Balancing

General

Section A of this Schedule 3 sets out gas balancing with an Operational Balancing Agreement (OBA) in place and Section B of this Schedule 3 sets out gas balancing with no Operational Balancing Agreement in place.

Notwithstanding the provisions set out in these sections, if an alternative arrangement is provided for by the Gas Market Company or under an equivalent scheme which AGLGN is a participant in, and AGLGN approves the alternative arrangements, then Section A and Section B of this Schedule 3 will cease to operate. AGLGN's approval will be subject to the alternative arrangement meeting the operational requirements of the Network and being reflected in the Services Agreement for each User.

Definitions

In this Schedule 3:

"Adjusted Requirement" has the meaning given to it in clause 7 of Section A of Schedule 3.

"Change in Target Linepack" means the User's Target Linepack at the end of the Day minus the User's Target Linepack at the end of the previous Day.

"Confirmed Nomination" has the meaning given to it in clause 8 of Section A of Schedule 3 or clause 8 of Section B of Schedule 3, as applicable.

"Forecast Requirement" has the meaning given to it in clause 4 of Section A of Schedule 3 or clause 4 of Section B of Schedule 3, as applicable.

"**Input**" has the meaning given to it in clause 13 of Section B of Schedule 3.

"Nomination" means the quantities of gas (in GJ) required to be delivered at a Delivery Point or a Receipt Point to or for the account of the User for each Day of a specified period.

"Nomination Day" has the meaning given to it in clause 4 of Section A of Schedule or clause 4 of Section B of Schedule 3, as applicable.

"Operational Balancing Agreement" or **"OBA"** means an agreement between pipeline/network owners to cooperate in the management of the pipeline/network interfaces.

"**Operational Balancing Cost**" has the meaning given to it in clause 15 of Section B of Schedule 3.

"**Outstanding Amount**" means the amount determined in accordance with clause 16 of Section B of Schedule 3.

"**Participant Balancing Amount**" means the quantity of gas which the User nominates to rectify part or all of the participant imbalance for the Network Section caused by differences between the total of Inputs and any quantity purchased from AGLGN under clause 16 of Section B Schedule 3, and Withdrawals on any Day.

"**Prior Imbalance Account**" means the cumulative difference between the total of the User's Confirmed Nominations for a Receipt Point and the Withdrawal Quantity for the User for the Receipt Point for all Days prior to the Nomination Day for which metering information is available from daily metered Delivery Points, minus the User's share of Line Pack for that Receipt Point.

"Proposed Nomination" has the meaning given to it in clause 7 of Section B of Schedule 3.

"**Reconciliation Amount**" means the quantity of gas which the User nominates to rectify part or all of the imbalance caused by the reconciliation of withdrawals between the quantity determined by data estimation and the quantity withdrawn as measured by meter on any Day.

"Settlement Amount" means the amount incurred by AGLGN in purchasing by tender a quantity of gas from a Shipper for the purpose of clearing, in whole or in part, that User's Prior Imbalance Account. Where settlement is required under clause 15(a) of Section A of Schedule 3, the quantity of gas required to effect such settlement will be allocated between all relevant Users with a negative Prior Imbalance Account on a pro rata basis.

"Shipper" means a person contracted to supply gas to the Receipt Point on behalf of the User or on behalf of the person from which the User purchases gas at that Receipt Point.

"Target Linepack" means target quantity of gas in a Network as determined by AGLGN for each User at the end of a Day, in accordance with the following:

> Linepack for the Trunk Section at the end of the Day will be allocated to each User in proportion to its MDQ (or where there is no MDQ defined in the Service Agreement, an amount determined by AGLGN after consultation with that User). In all other Network Sections the target linepack for a single designated User will be deemed to be equal to the Linepack in the Section, and the target linepack for each other User will be deemed to be zero.

"User's Fiduciary Guarantee" means a bank guarantee or other appropriate instrument such as a parent company guarantee (as agreed with AGLGN) as a financial warranty for the underwriting of Settlement Amounts or Outstanding Amounts as appropriate.

"**Wilton Network Section**" means the Wilton-Newcastle Network Section and the Wilton-Wollongong Network Section.

SCHEDULE 3: SECTION A
GAS BALANCING WITH OPERATIONAL BALANCING AGREEMENT

A. Introduction

1. An OBA is an agreement between pipeline/network owners to cooperate in the management of the pipeline/network interfaces and is structured to minimise the impact of local physical variations on pipeline and network transportation arrangements.

2. Under an OBA, the nominations of Users of the Network and Shippers in the pipelines are deemed to flow into the Network for the purposes of Network imbalance calculation and pipeline delivery invoicing and balancing. User imbalances will exist in the Network. These imbalances will reflect the difference between each Users cumulative confirmed nomination and cumulative actual withdrawals from the Network. User imbalances are corrected through nominations or through the nomination process or through settlement between individual participants and the Network.

3. The operational imbalances between the Network and Pipelines and User imbalances will normally be reduced by the action of Users. Users are required to correct their individual imbalances through the nomination process.

B. Daily Forecasts and Nominations

4. Each Day, and for each Receipt Point at which the User receives gas, the User will inform AGLGN of its gas requirements ("Forecast Requirement") for the next Day ("Nomination Day"). The Forecast Requirement for a Receipt Point is to include the following components:

   (a) gas nomination in total and for each Shipper at that Receipt Point, calculated in accordance with clause 5;

   (b) forecast requirement for non-daily metered Tariff Customers (which will not include any Reconciliation Amount);

   (c) Reconciliation Amount determined in accordance with the Network Code or the Gas Retail Market Business Rules (whichever is applicable), provided that AGLGN is not required to accept the Reconciliation Amount as part of the Forecast Requirement unless the total of all Reconciliation Amounts for all Users on a Day in a Network Section equals zero; and

   (d) when required in advance by AGLGN, the forecast withdrawal at designated Delivery Points, and at times agreed between the User and AGLGN.

5. Nominations of the components of Forecast Requirements will be made in good faith so that the total quantity nominated under 4(a) for all Receipt Points serving the Network Section is the aggregate amount which the User intends to withdraw from the Network Section on the Nomination Day under all transportation agreements, adjusted for any quantity made available to or by other Users under a Gas Swap Service, and the total and Shipper quantities nominated under 4(a) are consistent with the quantities of gas which the User is entitled to have delivered to the Receipt Point.

6. Where the User has a Local Network Service and a Corresponding Trunk Service, the User may make a single nomination in respect of those Services for that Receipt Point.

7. AGLGN will advise the User of the quantity of gas ("Adjusted Requirement") which the User should deliver to each Receipt Point on the Nomination Day in order to enable AGLGN to:

   (a) satisfy the User's Forecast Requirement;

   (b) reduce the User's Prior Imbalance Account until it is zero; and

   (c) satisfy any other aggregate needs for the relevant Network Section (including adjustment for the User's change in share of linepack and any other adjustments due to revised metering information) to ensure safe and reliable supply.

8. Where the User has more than one Shipper at the Receipt Point, the User will apportion the User's Adjusted Requirement between its Shippers ("Confirmed Nomination") and advise AGLGN.

9. Where the User has only a single Shipper at the Receipt Point, the User's Adjusted Requirement is the User's Confirmed Nomination.

10. AGLGN will advise each relevant Shipper of the User's Confirmed Nomination and each relevant Shipper and Pipeline operator of the aggregate nomination for the Shipper and Pipeline operator for that Receipt Point.

11. Should the User fail to provide AGLGN with a valid Forecast Requirement or User's Confirmed Nomination, AGLGN shall determine the User's Confirmed Nomination based on the User's Forecast Requirement (adjusted for any Reconciliation Amount) for the same day in the prior week (or where such day is a public holiday, based on the same day in the week two weeks prior).

12. Each of the obligations set out in Sections 4 to 11 must be completed in accordance with a timetable:

   (a) determined through consultation between AGLGN, the operators of the pipelines, and any established gas industry governance body; and

   (b) published from time to time in the Gas Retail Market Business Rules.

C. Prior Imbalance Account

13. AGLGN shall determine the User's Prior Imbalance Account for each Receipt Point.

14. Each User shall provide AGLGN with a User's Fiduciary Guarantee to an amount reasonably determined by AGLGN having regard to the maximum amount which the User's Prior Imbalance Account may reach.

15. AGLGN may require settlement by the User of the User's Prior Imbalance Account in part or whole, when:

   (a) the Operational Balancing Agreement requires settlement or is terminated; or

(b) a Services Agreement between the User and AGLGN is terminated.

16. AGLGN will issue a notice requiring payment of the Settlement Amount specified in the notice within 7 days of the date of the notice. Should the User fail to comply with the notice within that time, AGLGN may use the User's Fiduciary Guarantee to pay the Settlement Amount under that notice.

D. Participant Balancing

17. In relation to participant balancing, AGLGN and the User will comply with:

(a) the provisions of the Network Code; or

(b) where they replace the relevant provisions in the Network Code, the provisions contained in Gas Retail Market Business Rules.

E. Cessation of the Operational Balancing Agreement

18. The Operational Balancing Agreement and the opportunities it provides for the market rely on the participation of AGLGN and infrastructure owners directly upstream remaining parties to the Agreement.

19. In the circumstances where the Operational Balancing Agreement ceases to be effective in the opinion of AGLGN, the following will occur as transitional arrangements:

(a) AGLGN will issue notices to all Users requiring payment of Settlement Amounts for all outstanding User Imbalance Accounts; and

(b) The provisions in Section B "Gas Balancing with no Operational Balancing Agreement" will apply.

F. Definitions for Section A

20. In this Section A of Schedule 3, Withdrawal Quantities means the total of:

(a) ***Non-Tariff Withdrawals,*** being the total quantity of gas withdrawn by the User of a Non-Tariff Service, adjusted for the total of any quantity provided to or by other Users under a Gas Swap Service on the Day, at all Non-Tariff Delivery Points, as determined by measurement or as otherwise agreed under the Service Agreement; and

(b) ***Tariff Withdrawals,*** determined as the Total Tariff Withdrawals for the User of a Tariff Service, allocated between the Receipt Points used by the User in supplying Tariff Delivery Points either:

(i) in proportion to the User's forecast requirement for non-daily metered Tariff Customers under clause A 4(b) for each Receipt Point, or

(ii) using a proportioning method agreed with the User,

where ***Total Tariff Withdrawals*** are:

(i) the quantity of gas withdrawn at non daily metered Tariff Delivery Points, calculated, and allocated to the User, in

accordance with the Network Code or the Gas Retail Market Business Rules (whichever is applicable) provided the applicable Code allocates the total quantity of gas withdrawn by all users at non daily metered Tariff Delivery Points on the Day, and where it does not do so, the quantity withdrawn will be the quantity calculated and allocated by AGLGN for each Network Section in proportion to quantities nominated by all Users of that Network Section under clause A 4(b); plus

(ii) the total quantity of gas withdrawn on the Day at all of the User's daily metered Tariff Delivery Points.

SCHEDULE 3: SECTION B
GAS BALANCING WITH NO OPERATIONAL BALANCING AGREEMENT

A. General Qualifications

In small network sections located upstream of Wilton, each User will be deemed to be in balance within the Network Section (ie. inputs will be deemed to be equal to withdrawals for each user.)

1. Whenever there is no Operation Balancing Agreement in effect, the following provisions will apply. These are structured on the understanding that:

   (a) each Network Section will only have one pressure controlled Receipt Point, all other Receipt Point will be flow controlled;

   (b) the operator of a pipeline for flow controlled Receipt Points will aim to input a quantity of gas each Day at each Receipt Point equal to the Confirmed Nominations of Users served by it through that Receipt Point;

   (c) the Receipt Point at Wilton from the Moomba Sydney Pipeline will be pressure controlled; and

   (d) UAG is supplied by AGLGN.

2. If any of these circumstances change then the method for determining Input quantities and the arrangements for gas balancing will be reviewed and varied to the extent necessary to take account of the changed circumstances, subject to the approval of the Relevant Regulator.

B. Daily Forecasts and Nominations

3. Each Day, and for each Receipt Point, the User will provide AGLGN with its forecast of Withdrawal Quantities from the Network for each of the next three Days.

4. Each Day, and for each Receipt Point at which the User receives gas, the User will inform AGLGN of its gas requirements ("Forecast Requirement") for the next Day ("Nomination Day") for each relevant Network Section. The Forecast Requirement for a Receipt Point is to include the following components:

   (a) gas nomination in total for that Receipt Point calculated in accordance with clause 5;

   (b) forecast non-daily metered Tariff Requirements (which will not include any Reconciliation Amount);

   (c) Reconciliation Amount determined in accordance with the Network Code or the Gas Retail Market Business Rules (whichever is applicable), provided that AGLGN is not required to accept the Reconciliation Amount as part of the Forecast Requirement unless the total of all Reconciliation Amounts for all Users on a Day in a Network Section equals zero;

(d) Participant Balancing Amount determined in accordance with the Network Code or the Gas Retail Market Business Rules (whichever is applicable), provided that AGLGN is not required to accept the Participant Balancing Amount as part of the Forecast Requirement unless the total of all Participant Balancing Amounts for all Users of a Day in a Network Section equals zero; and

(e) when required in advance by AGLGN, the forecast withdrawal at designated Delivery Points, and at times agreed between the User and AGLGN.

In respect of a User at a Delivery Point at which an automatic feedback control system is used to establish a direct relationship between input at an Eastern Gas Pipeline Receipt Point and the quantity actually withdrawn at the Delivery Point, the User must provide a Forecast Requirement for all Delivery Points other than that Delivery Point.

5. Nominations of the components of Forecast Requirements will be made in good faith so that the total quantity nominated under clause 4(a) for all Receipt Points serving the Network Section is the aggregate amount which the User intends to withdraw from the Network Section on the Nomination Day under all Service Agreements, adjusted to account for any quantity made available to or by other Users under a Gas Swap Service.

6. Where the User has a Local Network Service and a Corresponding Trunk Service, the User may make a single nomination in respect of those Services for that Receipt Point.

7. AGLGN will advise the User of the quantity of gas which the User should plan to deliver or have delivered into the Network at each Receipt Point on the Nomination Day in order to enable AGLGN to satisfy the User's withdrawal requirements and any other aggregate needs for the relevant Network Section (including adjustment for the User's change in share of Linepack) to ensure safe and reliable supply ("Proposed Nomination") .

8. The User will advise AGLGN of the Quantity of Gas which the User intends to deliver or have delivered into the Network at each Receipt Point on the Nomination Day (the User's "Confirmed Nomination").

9. Should the User fail to provide AGLGN with a valid Confirmed Nomination, AGLGN shall determine the User's Proposed Nomination as the Confirmed Nomination.

10. Each of the obligations set out in Sections 3 to 9 must be completed in accordance with a timetable:

(a) determined through consultation between AGLGN and any gas industry governance body which may be established; and

(b) published from time to time in the Gas Retail Market Business Rules (or prior to the adoption of such Code, in the Network Code or by AGLGN).

C. Input and Withdrawal Quantities

General

11. Gas balancing is carried out between the Receipt Point at which gas intended for a Delivery Point first enters the Network, and that Delivery Point. Accordingly, where the User has corresponding Trunk and Local Network Services, inputs are determined at the Receipt Point specified under the Trunk Service and withdrawals are determined at the Delivery Point in the Local Network.

Withdrawal Quantities

12. In this Section B of Schedule 3, Withdrawal Quantities means the total of:

(a) ***Non-Tariff Withdrawals,*** being the total quantity of gas withdrawn by the User of a Non-Tariff Service, adjusted for the total of any quantity provided to or by other Users under a Gas Swap Service on the Day, at all Non-Tariff Delivery Points, as determined by measurement or as otherwise agreed under the Service Agreement; and

(b) ***Tariff Withdrawals,*** determined as the Total Tariff Withdrawals for the User of a Tariff Service, allocated between the Receipt Points used by the User in supplying Tariff Delivery Points either:

(i) in proportion to the User's Forecast Requirement for non-daily metered Tariff Customers under clause B4(b) for each Receipt Point; or

(ii) using a proportioning method agreed with the User, where:

Total Tariff Withdrawals are:

(i) the quantity of gas withdrawn at non daily metered Tariff Delivery Points, calculated, and allocated to the User, in accordance with the Network Code or the Gas Retail Market Business Rules (whichever is applicable), provided the applicable Code allocates the total quantity of gas withdrawn by all users at non daily metered Tariff Delivery Points on the Day, and where it does not do so, the quantity withdrawn will be the quantity calculated and allocated by AGLGN for each Network Section in proportion to quantities nominated by all Users of that Network Section under clause B 4(b); plus

(ii) the total quantity of gas withdrawn on the Day at all of the User's daily metered Tariff Delivery Points.

Input Quantities

13. In this Section B of Schedule 3, the User's Input will be one of the following amounts:

(a) Where there is only one User at the Receipt Point the User's Input will be the metered quantity at the Receipt Point net of UAG purchased by AGLGN.

(b) Where two or more Users receive gas at the same flow controlled Receipt Point,

(i) Subject to (ii), the metered quantity at the Receipt Point net of UAG purchased by AGLGN will be allocated to the Users in proportion to their Confirmed Nominations for the Day.

(ii) In respect of a User at a Delivery Point at which an automatic feedback flow control system is used to establish a direct relationship between input at a flow controlled Receipt Point and the quantity actually withdrawn at the Delivery Point, the quantity allocated will be the difference between the metered quantity at the Receipt Point net of UAG purchased by AGLGN, and the total of the Confirmed Nominations for all other Users plus the User's Confirmed Nomination for its other Delivery Points.

(c) Where two or more Users receive gas at the Wilton Receipt Point and:

(i) where the quantity metered at the Wilton Receipt Point on a Day net of UAG purchased by AGLGN exceeds or is equal to the aggregate of Confirmed Nominations for Users of that Receipt Point for the Day, then each such User will be deemed to have received its Confirmed Nomination for the Day.

(ii) where the quantity metered at the Wilton Receipt Point on a Day net of UAG purchased by AGLGN, is less than the aggregate of Confirmed Nominations for Users of that Receipt Point for the Day, then the total quantity metered at that Receipt Point on the Day net of UAG purchased by AGLGN will be allocated among those Users in proportion to their Confirmed Nominations for the Day.

(d) Where there is more than one User at the Receipt Point on any other Network Section, the Input for each User will be deemed to be the User's withdrawal plus Change in Target Linepack.

D. Gas Balancing

14. The User is required to act in good faith to ensure that the quantity of gas delivered to each Network Section for or on behalf of the User on each Day is equal to the quantity withdrawn from the Network Section by the User on the Day, adjusted for any Change in the User's Target Linepack for the Network Section (and subject to any amounts which the User may input under the participant balancing arrangements referred to in Section E other than for the purpose of delivery to the Delivery Point on that Day) and adjusted for any

quantity made available to or by other Users under a Gas Swap Service. If a User has more than one Service Agreement pertaining to a particular Network Section and Receipt Point, gas balancing arrangements will apply to the aggregates of quantities input at the Receipt Point and withdrawn under those agreements.

15. Where clause 13(c)(i) under Input quantities applies in relation to a Day for the Wilton Receipt Point, AGLGN will purchase[45] a quantity of operational balancing gas equal to the difference between the total quantity metered at the Wilton Receipt Point on the Day net of UAG purchased by AGLGN and the aggregate of Confirmed Nominations for Users of that Receipt Point for the Day. The cost of purchasing the operational balancing gas is the Operational Balancing Cost.

16. The quantity of gas purchased by AGLGN will be sold by it to those Users of the Wilton Network Section whose withdrawals on the Day exceed their Inputs adjusted for any Participant Balance Amount for the Day, in proportion to the amounts of those differences for that Receipt Point, at the Operational Balancing Cost. Such Users are obliged to purchase the quantities so nominated by AGLGN.

17. Each User shall provide AGLGN with a User's Fiduciary Guarantee to an amount reasonably determined by AGLGN having regard to the maximum amount which the Outstanding Amount may reach. Should the User fail to purchase the quantities of gas as nominated by AGLGN under clause 16 within 7 days, AGLGN may use the User's Fiduciary Guarantee to pay the Outstanding Amount.

E. Participant Balancing

18. In relation to participant balancing, AGLGN and the User will comply with:

    (a) the provisions of the Network Code; or

    (b) where they replace the relevant provisions in the Network Code, the provisions contained in Gas Retail Market Business Rules.

[45] AGLGN will seek tenders for the supply of operational balancing gas on an annual or bi-annual basis.

SCHEDULE 4:
Operational Principles

Load Shedding

This policy will apply to all Local Network and Trunk Services, irrespective of the Receipt Point or User's upstream arrangements.

Policy

In the event of gas supply reduction, or a prospective gas supply reduction, in a part of the Network, AGLGN will initiate a load shedding procedure to preserve the integrity of the Network and minimise the disruption to operations at Users' sites.

Load Shedding

Load shedding is defined as a controlled interruption to, or reduction in, the delivery of gas to Customers.

Ranking and Priorities

Load shedding, will be implemented by AGLGN according to the following schedule of priorities:

Load Shedding Priority	Load Type
1	Interruptible Loads.
2	A Delivery Point which serves more than one Customer, and where no arrangement exists between AGLGN and the operator of the facilities beyond the Delivery Point for shedding loads served by those facilities.
3	Sites where gas is not used for production.
4	Sites where load is transferable to an alternative fuel.
5	Load that may be reduced without damage to product or plant.
6	Load that may be halted without damage to product or plant.
7	Load where halting will cause product damage.
8	Load where halting will cause plant damage.
9	Load not transferable to alternative fuel at hospital and essential service sites.
10	Tariff sites (Residential, Commercial and Industrial).

Priority will be determined by the usage specified in the Schedule to the Service Agreement, or if no usage is specified, by AGLGN. Users must inform AGLGN of any changes in priority due to changes in customer usage. Users shall respond to requests from AGLGN for information on priorities and customer emergency contacts within a reasonable period of time.

Restoration of Service

Where feasible, supply will be restored in reverse order to that in which load shedding was implemented.

Emergency contacts for Customers

Users must ensure that they advise AGLGN of emergency contacts for Customers at Non-Tariff Delivery Points and ensure that such contact details are current at all times.

Users must advise of emergency Contact details for communication between AGLGN and the User during load shedding. User emergency contact personnel must be available to assist AGLGN during load shedding if required.

Emergency Load Management Systems (ELMS)

Site and Network information is maintained through ELMS, in consultation with Users, and is used as the basis for the load shedding.

ELMS is the process of contacting Customer sites to notify them of an interruption to their gas supply as a result of a problem with the delivery of gas, and reconnecting them when delivery capability has been restored. All Users of the Network will be required to participate in and comply with the scheme.

ELMS is an AGLGN computer based system used as an aid in contacting and recontacting Customer sites in the event of a supply failure. Information on the ELMS system relating to a User is available to the User on request.

Suspension

If a User fails to comply with the load shedding procedures set out in this Schedule 4, AGLGN may suspend the delivery of Gas to a Delivery Point.

Liability

AGLGN will not be liable for any losses, liabilities or expenses incurred by the User and/or the Users' Customers arising from load shedding, where AGLGN acts in accordance with the principles of the Access Arrangement in good faith. The User will be liable for and indemnify AGLGN against any claims made by the User's customers (including against the User) arising out of AGLGN's implementation of load shedding procedures.

Establishment Of Receipt Points

General

Any person (whether a User or not) seeking to interconnect with the Network for the purpose of enabling a User or Users to deliver gas to the network for onward transportation may establish a new Receipt Point. Where a User or a third party wishes to establish a new Receipt Point, they must enter into an agreement with AGLGN including the following matters.

Receipt Point and Equipment Upstream

The pipe or system of pipes upstream of the Receipt Point, and the new Receipt Point shall comply with the following requirements in order to ensure that the integrity, safety and operating ability of the Network is not compromised:

(a) The location of a new Receipt Point will be agreed to by the third party and AGLGN. AGLGN will only withhold its agreement to a location sought by the third party on the basis of technical, operational or safety considerations.

(b) Each Receipt Point must have an associated Receipt Station as described in Schedule 2A.

(c) To safeguard against the hazards of over `pressurisation of the Network the Receipt Station must be equipped with overpressure protection facilities in accordance with AGLGN's usual standards and requirements, including AS2885, at the third party's expense.

(d) A remotely controlled isolation valve operable by AGLGN will be installed at the outlet of the Receipt Station upstream of the new Receipt Point, at the third party 's expense.

(e) The Receipt Point will be at the flange immediately upstream of the facilities described above, or as otherwise agreed by AGLGN. All facilities upstream of the new Receipt Point will be the responsibility of the third party.

(f) The operational mode of a Receipt Station for a new Receipt Point must be compatible with the operational mode of the Network.

The hot tap connection to connect the facilities to the Network will be designed and constructed with AGLGN's usual standards and requirements, including AS2885, at the third party 's expense.

Modifications may be required to the Network and/or AGLGN systems to integrate the new Receipt Point into the operation of the Network. Requirements will vary depending on the location of the new Receipt Point. The party seeking to establish the Receipt Point will bear the reasonable costs of such modifications, whether identified before or after installation of the Receipt Point unless AGLGN can recover them from Users of the Receipt Point.

Cathodic Protection of Facilities

The third party must design, install, and operate, any cathodic protection system necessary to protect its facilities at its own cost. Cathodic protection facilities must be

installed in such a manner as to avoid any interference which may be detrimental to AGLGN's facilities and must be electrically isolated from AGLGN's facilities.

Installation and Operation

In the interests of safety and ensuring the integrity of AGLGN's pre-existing facilities, the third party must cooperate with AGLGN to establish, in a timely manner, appropriate arrangements and procedures for the safe installation and operation of the third party's facilities, and for the management of emergency situations involving those facilities and the Network.

SCHEDULE 5:
Gas Quality Specification

The User must ensure that gas delivered by it or on its behalf at each Receipt Point complies with:

(a) the specifications prescribed by any New South Wales law, including but not limited to any regulation made under the *Gas Supply Act 1996 (NSW)*, applying during the Agreement that extends to any such gas;

(b) where the law referred to in paragraph (a) does not prescribe a particular matter, or for any period during the Service Agreement in which there is no such law, the specification set out below; and

(c) any other specifications notified by AGLGN to a User from time to time.

The specifications prescribed by any New South Wales law prevail over the specifications referred to in (b) and (c) of Schedule 5, to the extent of any inconsistency.

Where Gas quality is measured upstream of the Network, permissible variations outside of the specifications will be determined by AGLGN from time to time, subject to the specifications prescribed by any New South Wales law.

Parameter[46]	**Specification Limit**
1 Wobbe Index	Min. 46.0 MJ/m^3 Max 52.0 MJ/m^3
2 Oxygen	Max. 0.2 mol%
3 Hydrogen Sulphide	Max. 5.7 mg/m^3
4 Total Sulphur[47]	Max. 50 mg/m^3
5 Water Content	Max. Dew Point 0°C at maximum transmission pressure upstream of receipt point, but in any case no more than 112.0 mg/m^3
6 Hydrocarbon Dewpoint	Max. 2° at 3,500 kPaG
7 Total Inert Gases	Max. 7.0 mol %
8 Solid Matter and Liquids	Nil Permitted
9 Temperature at ReceiptPoint	-5°C to 50°C
10 Odorant	Odorant to be of a type approved by AGLGN. Level of odorant to be 12 milligrams per cubic metre or such other level as the AGLGN may require.

[46] The standard testing conditions for all gas properties are
Temperature 15°C
Absolute Pressure 101.325 kPa
with the natural gas dry (that is, completely free of water vapour)

[47] Including odorant, or an allowance for odorant in cases where odorant is injected downstream of test points.

SCHEDULE 6:
Request For Service

Access and Requests for Services

Reference Services and Negotiated Services

In order to obtain access to a Negotiated Service or a Reference Service a User or Prospective User will observe the following procedures.

- A Prospective User must lodge a Request and meet AGLGN's prudential requirements. Where the MHQ is expected to exceed 6m3/Hour a Request must include as a minimum the level of detail envisaged by this Schedule 6. Where the MHQ is expected to be less than 6m3/Hour the Request must include such details as requested by AGLGN from time to time.

- A Prospective User must lodge a separate Request for access to the Local Network and the Trunk, and may nominate those Requests to be Linked Requests.

- Where a User has a Capacity Reservation Service for both Local Network and Trunk, a Request for Summer Tranche Capacity or Short-Term Capacity must be lodged for both the Local Network and the Trunk and the Requests will be treated as Linked Requests. Where a Request relates to capacity under a Local Network Reference Service which is required to have a corresponding Trunk Service (and vice versa), a request must be lodged in respect of each Service and the Requests will be treated as Linked Requests.

- A Prospective User may have only one active Request in relation to the Trunk and the Local Network for the same tranche of capacity for a particular Delivery Point.

- AGLGN will advise the Prospective User where a Request is incomplete, and if so what is required to complete the Request. If the Prospective User corrects the deficiency within 7 days, the priority of the Request will depend on the date on which AGLGN first received the Request. Otherwise, the priority will depend on the date on which AGLGN receives the complete Request.

- AGLGN will within the shortest reasonable time and in any event within 30 Days of receiving a complete Request advise whether capacity is available and at what price, and whether a queue exists for the capacity[48].

- A Request will lapse unless,

    - where a Request is a Linked Request, within 30 Days of AGLGN advising that capacity is available for both Requests, or

[48] Where the Request relates to Short-Term Capacity or Summer Tranche Capacity under a Capacity Reservation Service, AGLGN will respond within the times specified in section 2.1.1

- in all other cases, within 30 days of AGLGN advising that capacity is available for the Request

the Prospective User has either entered into a Reference Service Agreement or commenced bona fide negotiations[49].

- Where there is sufficient capacity to meet a Request, there will be no queue.

- Where there is insufficient capacity to satisfy a Request, then a queue will be formed and the Queuing Policy will apply.

[49] A Request for Service will not lapse in the event of a dispute being notified under the National Code until that dispute has been resolved in accordance with the National Code.

SCHEDULE 6B:
Request For Service Form

A single Request for Service Form is required for Local Network Reference Services and Corresponding Trunk Reference Services.

Sections 1, 2, 3, 4, and 5 must be completed for all Requests.
Sections 6 and 7 must be completed for additional capacity at an existing site.
Sections 6, 7, 8, and 9 must be completed for new delivery points.

1. PROSPECTIVE USER INFORMATION

Name of Prospective User:

A.B.N ----------

Contact Officer ----------

Position Title ----------

Telephone ----------

Fax ----------

Customer Contact Details:

Name ----------

Position Title ----------

Telephone ----------

Fax ----------

2. RECEIPT POINT INFORMATION

Receipt Point Location ----------

Entity supplying inlet gas ----------

3. DELIVERY POINT INFORMATION

Delivery Point Business Name ----------

A.B.N. ----------

Delivery Point Street Address ----------

Postcode ----------

Delivery Point is---------- Metres (N, S, E or W) from (nearest cross Street)

Delivery Point is located on the (N, S, E or W) side of the Street.

4. TRANSPORTATION INFORMATION

Service Requested	Managed Capacity/ Capacity Reservation/ Throughput/ Negotiated/ Tariff
	Short-Term Capacity/Summer Tranche

If Short-Term Capacity or Summer Tranche Capacity is requested there must be a pre-existing capacity reservation service in place,

Service Commencement Date ----------

Duration of Service Agreement Sought ----------

ANZIC code(s) ----------

Gas Applications ----------

AQ (GJ/yr) Annual Quantity ----------

MDQ (GJ/day) Maximum Daily Quantity ----------

MHQ (GJ/hr) Maximum Hourly Quantity ----------

5. DELIVERY STATION PRESSURE

Delivery Station Pressure (kPa) — Metering pressure (1.38, 2.75, 7.0, 35, 100, if other please specify)

6. APPLIANCE & GAS LOAD INFORMATION

Appliance Type	Hourly Rate (MJ/hr)	Operating Capacity (%)	Hour/ Day	Days/ week	Weeks/ year	Total Annual Quantity (TJ/yr)
Total						

Do any of these appliances have pilots or small flow rates? If so, which ones?

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7. FUEL CONVERSION INFORMATION

(if applicable)
Current Fuel Type

Current Annual Consumption (GJ/yr)

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8. DELIVERY STATION INFORMATION

If the customer requires other than a standard single run meter set, please specify:

Is the proposed meter set located indoors? Y / N
Is a security compound required? Y / N

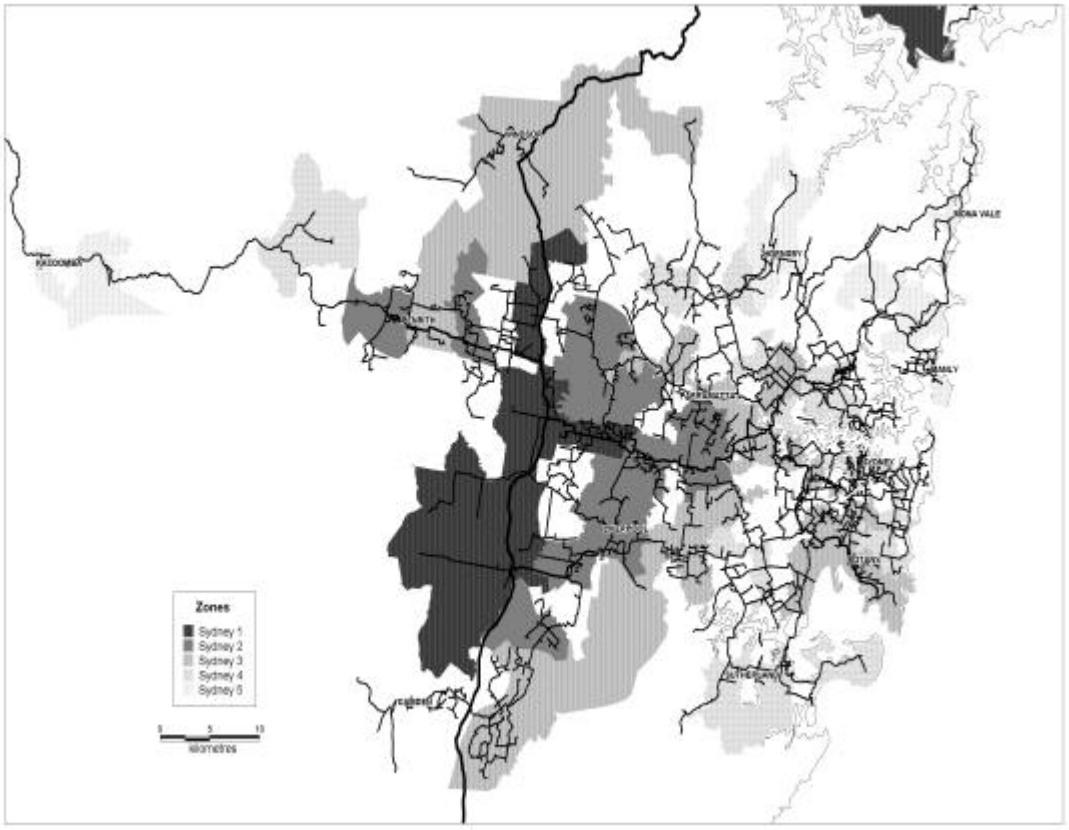
9. DELIVERY STATION LOCATION SKETCH

Please provide a sketch showing the proposed location of the meter set and the following:

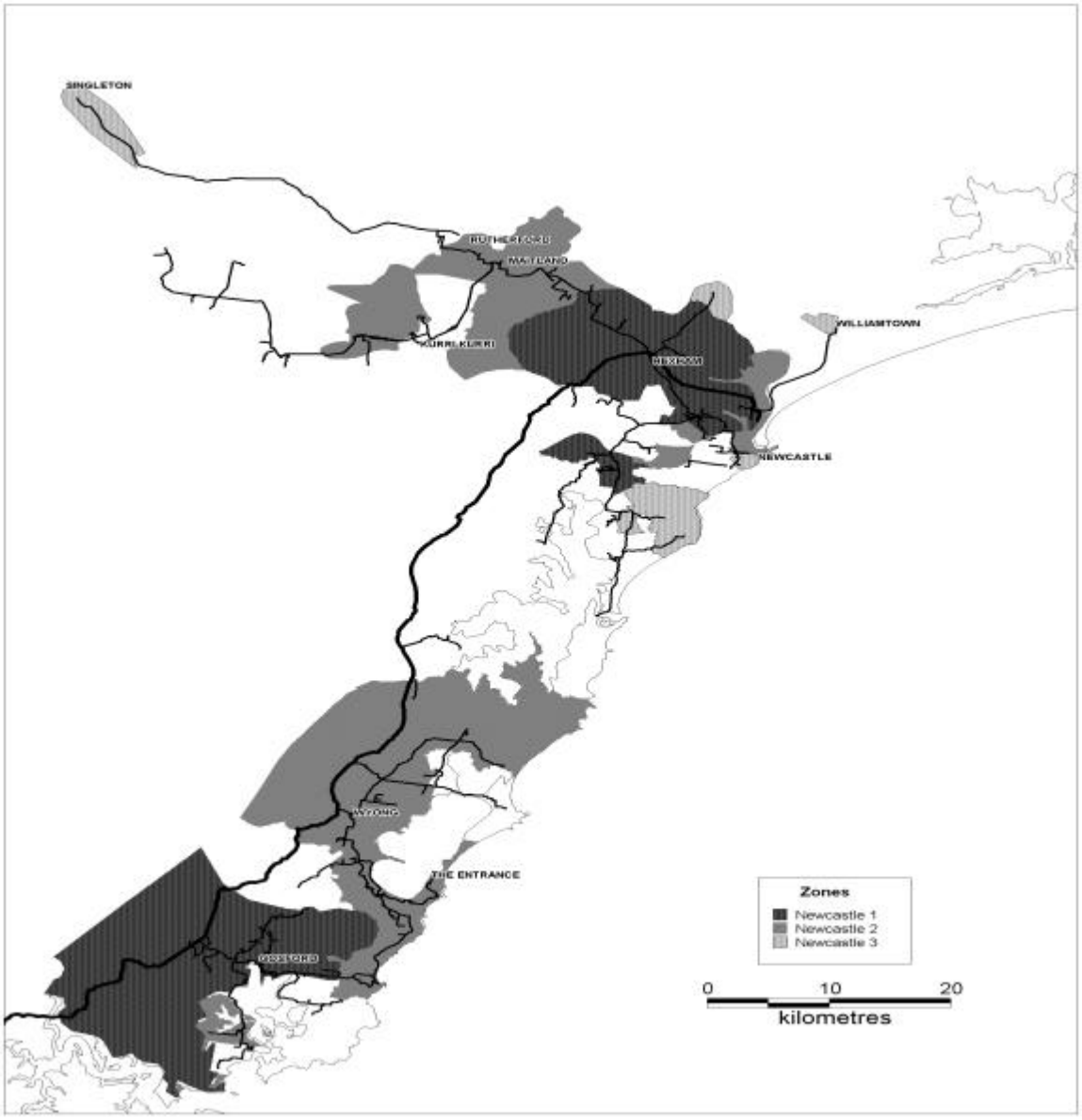
1. length of customer service (path valve to meter set);
2. surface restoration from front boundary to meter set;
3. any walls to be pierced or other obstacle, eg. stairs, retaining walls etc. to be negotiated;
4. all buildings and any other permanent structures on the site;
5. side and front building lines, and kerb line;
6. bearing (north).

SCHEDULE 7:
Sydney, Newcastle And Wollongong Local Network Price Zones, And Postcodes To Which Trunk Exit Zones Apply

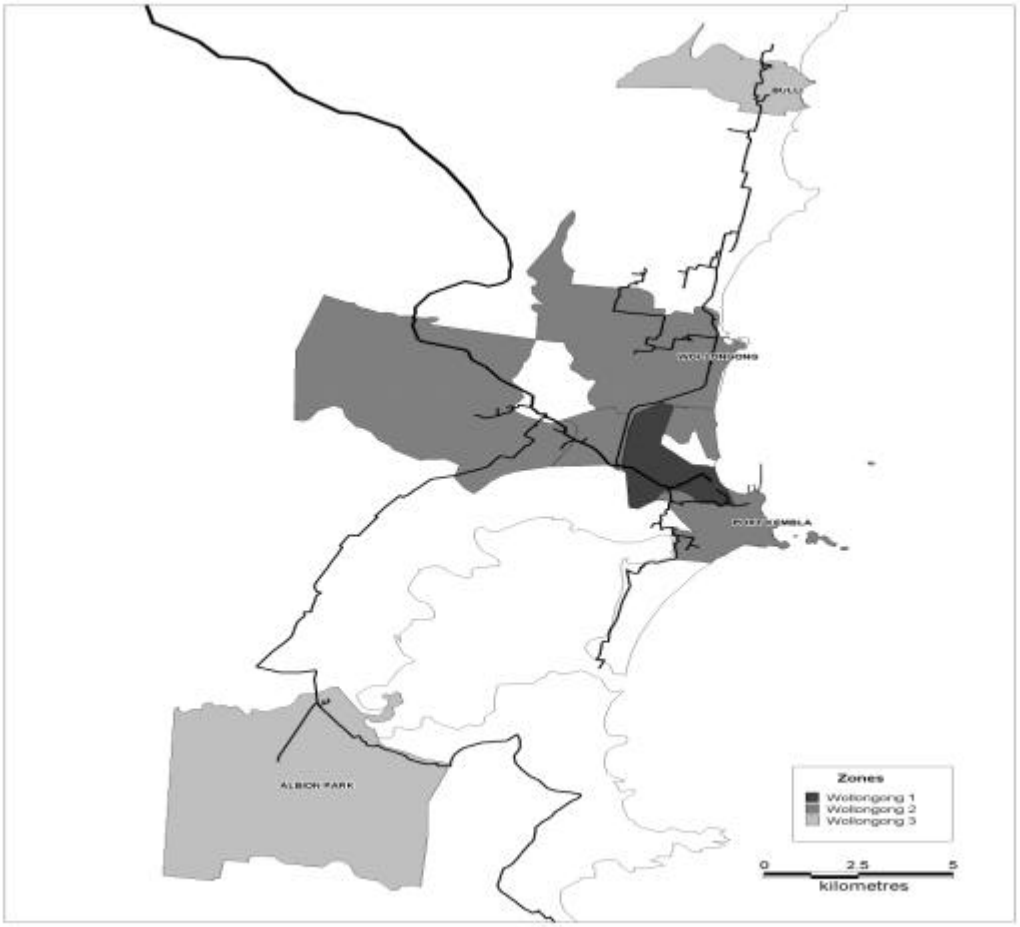
SYDNEY LOCAL NETWORK PRICE ZONE



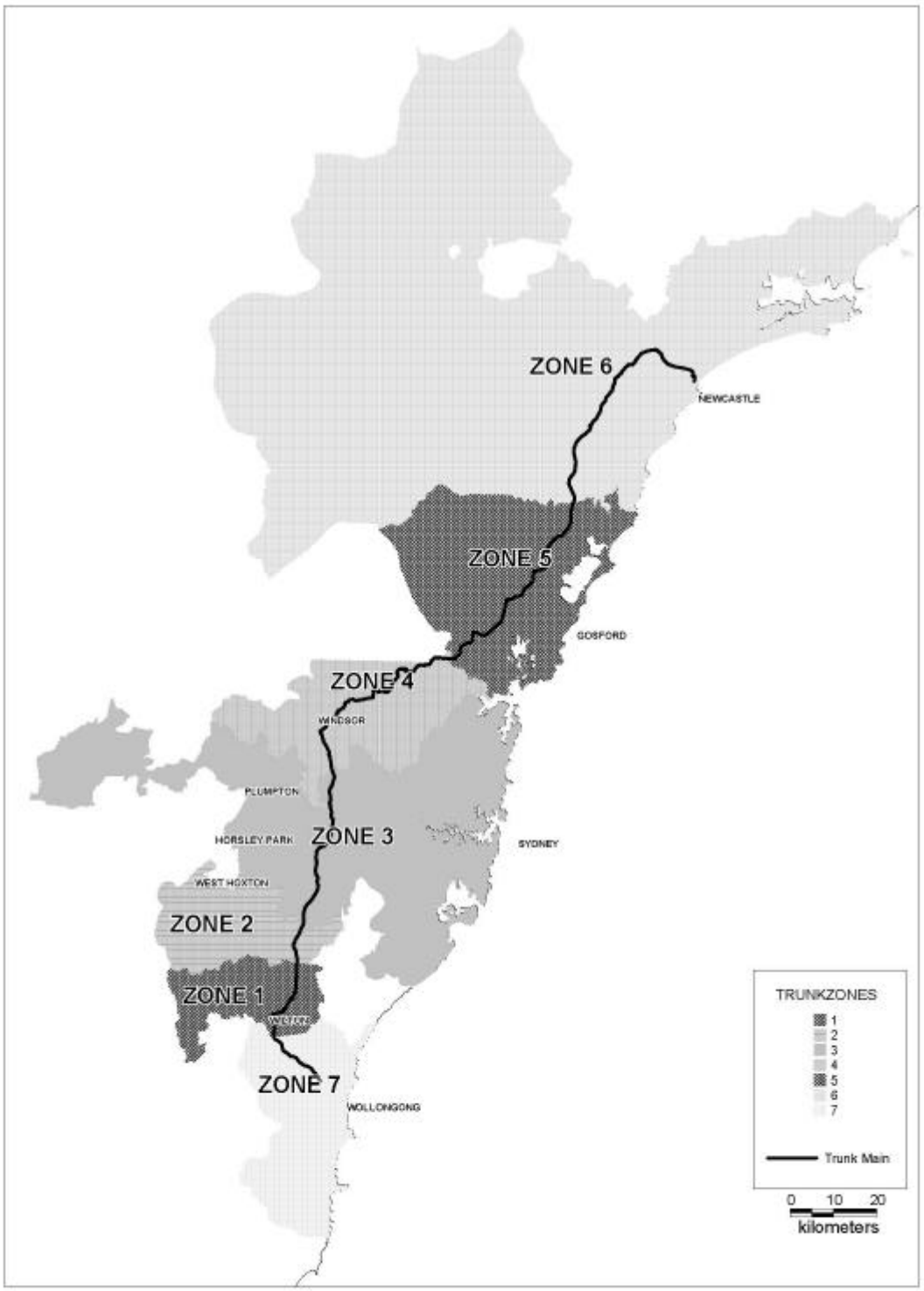
NEWCASTLE LOCAL NETWORK PRICE ZONES



WOLLONGONG LOCAL NETWORK PRICE ZONES



TRUNK EXIT ZONES



SCHEDULE 8:
RECEIPT POINT PRESSURES

	RECEIPT AND SUPPLY POINTS								
	TRS Location	Max. Receipt Pressure (kPa)	Min. Receipt Pressure (kPa)	Min. Delivery Pressure at Inlet to TRS/POTS	POTS Location	Max. Receipt Pressure (kPa)	Min. Receipt Pressure (kPa)	Min. Delivery Pressure at Inlet to TRS/POTS	
Moomba – Young (APT)					West Wyalong	10,000	1,750	1,750	Bland
Young – Lithgow (APT)	Cowra	10,000	1,750	1,750					Cowra
	Blayney	10,000	1,750	1,750					Blayney
	Orange	10,000	1,750	1,750					Orange
					Millthorpe	10,000	1,750	1,750	Orange
	Bathurst	10,000	1,750	1,750					Bathurst
									Evans
	Oberon	10,000	1,750	1,750					Oberon
	Lithgow	10,000	1,750	1,750					Greater Lithgow
					Wallerawang	10,000	1,750	1,750	Greater Lithgow

	RECEIPT AND SUPPLY POINTS								
	TRS Location	Max. Receipt Pressure (kPa)	Min. Receipt Pressure (kPa)	Min. Delivery Pressure at Inlet to TRS/POTS	POTS Location	Max. Receipt Pressure (kPa)	Min. Receipt Pressure (kPa)	Min. Delivery Pressure at Inlet to TRS/POTS	
	Young	7,000	1,750	1,750					Young
	Cootamundra	3,500	1,750	1,750					Cootamundra
					Junee	10,000	1,750	1,750	Junee
					Coolamon	10,000	1,750	1,750	Coolamon
					Ganmain	10,000	1,750	1,750	Coolamon
					Narrandera	10,000	1,750	1,750	Narrandera
	Rockdale	10,000	1,750	1,750					Narrandera
					Leeton	10,000	1,750	1,750	Leeton
					Murrami	10,000	1,750	1,750	Narrandera
	Yoogali (Griffith)	10,000	1,750	1,750					Griffith
Young – Wilton (APT)					Boorowa	7,000	1,750	1,750	Boorowa
					Yass	7,000	1,750	1,750	Yass
	Goulburn	7,000	1,750	1,750					Goulburn
	Marulan	7,000	1,750	1,750					Mulwaree
					Sally's Corner	7,000	1,750	1,750	Wingecarribee
	Mossvale	7,000	1,750	1,750					Mittagong
	Bowral	7,000	1,750	1,750					Wingecarribee
					Bargo	7,000	1,750	1,750	Wingecarribee
Wilton CTS		7,000	3,800+						

	RECEIPT AND SUPPLY POINTS								
	TRS Location	Max. Receipt Pressure (kPa)	Min. Receipt Pressure (kPa)	Min. Delivery Pressure at Inlet to TRS/POTS	POTS Location	Max. Receipt Pressure (kPa)	Min. Receipt Pressure (kPa)	Min. Delivery Pressure at Inlet to TRS/POTS	
Wilton to Mount Kiera (AGL)	Mt Keira	7,000	3,800+	2,800kPa[50]					
Mt Keira-Wollongong (AGL)	Wollongong	3,500	2,800	1,750					Wollongong Shellharbour Kiama
Wilton-Horsley Park (AGL)	Appin Campbelltown West Hoxton	7,000 7,000 7,000	3,800+ 3,800+ 3,800+	1,750 1,750 1,750	Appin	7,000	3,800	1,750	Wollondilly Sydney (see list)
Horsley Park-Plumpton (AGL)	Horsley Park Eastern Creek	7,000 7,000	3,800+ 3,800+	3,500 3,500					Sydney (see list)

[50] Note a minimum requirement of 200kPa pressure differential is required across Mount Keira TRS

	RECEIPT AND SUPPLY POINTS								
	TRS Location	Max. Receipt Pressure (kPa)	Min. Receipt Pressure (kPa)	Min. Delivery Pressure at Inlet to TRS/POTS	POTS Location	Max. Receipt Pressure (kPa)	Min. Receipt Pressure (kPa)	Min. Delivery Pressure at Inlet to TRS/POTS	
Plumpton-Kooragang Island (AGL)	Plumpton	7,000	3,800+	1,750	Maroota	7,000	3,800	1,750	Sydney (see list)
	Windsor	7,000	3,800+	1,750					
	Gosford	7,000	3,800+	1,750	Warnervale	7,000	3,800	1,750	Gosford
	Wyong	7,000	3,800+	1,750					Wyong
	Hexham	7,000	3,800+	1,750	Wyee	7,000	3,800	1,750	Lake Macquarie
	Kooragang Island	7,000	3,800+	1,750	Morisset	7,000	3,800	1,750	Newcastle
					Minmi	7,000	3,800	1,750	Maitland
									Cessnock
									Singleton
									Muswellbrook
									Port Stephens
Marsden – Dubbo (APT)	Dubbo	10,000	1,750	1,750	Dubbo West	10,000	1,750	1,750	Dubbo
					Forbes	10,000	1,750	1,750	Wellington
					Parkes	10,000	1,750	1,750	Forbes
					Narromine	10,000	1,750	1,750	Parkes
									Narromine
–									

	RECEIPT AND SUPPLY POINTS								
	TRS Location	Max. Receipt Pressure (kPa)	Min. Receipt Pressure (kPa)	Min. Delivery Pressure at Inlet to TRS/POTS	POTS Location	Max. Receipt Pressure (kPa)	Min. Receipt Pressure (kPa)	Min. Delivery Pressure at Inlet to TRS/POTS	
Horsley Park CTS (EGP)		7,000	3,600+						
Port Kembla CTS (EGP		3,500	2,600+						

If marked "+" then the Minimum Receipt Pressure may be subject to future increase to the maximum receipt pressure

AGL GAS NETWORKS

Addendum to AGL Gas Networks Access Arrangement for NSW

Schedule of Prices in 2004/2005 Dollars

Exclusive of GST

This addendum is for information purposes only and does not form part of the Access Arrangement. All charges in this addendum are exclusive of GST and expressed in 2004/2005 dollars.

Reference Tariffs have been determined from the forecast Cost of Service throughout the Regulatory Period as set out in the Access Arrangement Information. The Cost of Service in the Access Arrangement Information and the numerical values for Reference Tariffs in this addendum are expressed in 2004/05 dollars.

NON TARIFF DELIVERY POINTS

LOCAL NETWORK CHARGES

The Local Network Unit Charges, GST exclusive, expressed in real 2004/2005 dollars ($GJ/MDQ per annum) for the LN Zones in the Sydney, Newcastle/Central Coast and Wollongong areas are:

Sydney

Local Network Unit Charge for Sydney – $/GJ of MDQ per annum in real 2004/2005 dollars (GST Exclusive)

	Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
LN Zone 1					
First 200GJ of booked MDQ	146.999	146.739	146.452	145.382	144.250
Next 400GJ of booked MDQ	88.199	88.043	87.871	87.229	86.550
Next 1000GJ of booked MDQ	58.800	58.695	58.581	58.153	57.700
Next 2000GJ of booked MDQ	44.100	44.022	43.936	43.615	43.275
Rest	29.400	29.348	29.290	29.076	28.850
LN Zone 2					
First 200GJ of booked MDQ	168.727	168.060	166.093	164.483	162.772
Next 400GJ of booked MDQ	101.236	100.836	99.656	98.690	97.663
Next 1000GJ of booked MDQ	67.491	67.224	66.437	65.793	65.109
Next 2000GJ of booked MDQ	50.618	50.418	49.828	49.345	48.832
Rest	33.745	33.612	33.219	32.897	32.554

Sydney

Local Network Unit Charge for Sydney – $/GJ of MDQ per annum in real 2004/2005 dollars (GST Exclusive)

	Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
LN Zone 3					
First 200GJ of booked MDQ	241.045	238.591	235.601	232.025	228.511
Next 400GJ of booked MDQ	144.627	143.154	141.361	139.215	137.107
Next 1000GJ of booked MDQ	96.418	95.436	94.240	92.810	91.404
Next 2000GJ of booked MDQ	72.314	71.577	70.680	69.607	68.553
Rest	48.209	47.718	47.120	46.405	45.702
LN Zone 4					
First 200GJ of booked MDQ	418.789	412.978	407.241	399.593	391.844
Next 400GJ of booked MDQ	251.274	247.787	244.344	239.756	235.107
Next 1000GJ of booked MDQ	167.516	165.191	162.896	159.837	156.738
Next 2000GJ of booked MDQ	125.637	123.893	122.172	119.878	117.553
Rest	83.758	82.596	81.448	79.919	78.369
LN Zone 5					
First 200GJ of booked MDQ	2354.469	2321.349	2288.376	2243.723	2198.468
Next 400GJ of booked MDQ	1412.681	1392.809	1373.025	1346.234	1319.081
Next 1000GJ of booked MDQ	941.788	928.540	915.350	897.489	879.387
Next 2000GJ of booked MDQ	706.341	696.405	686.513	673.117	659.541
Rest	470.894	464.270	457.675	448.745	439.694

Prices exclude GST. GST will be added to all prices in accordance with clause 3.19 of the Access Arrangement

Newcastle/Central Coast

Local Network Unit Charge for Newcastle/Central Coast – $/GJ of MDQ per annum in real 2004/2005 dollars (GST Exclusive)

	Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
LN Zone 1					
First 200GJ of booked MDQ	65.345	64.485	63.640	62.673	61.824
Next 400GJ of booked MDQ	39.207	38.691	38.184	37.604	37.095
Next 1000GJ of booked MDQ	26.138	25.794	25.456	25.069	24.730
Next 2000GJ of booked MDQ	19.603	19.346	19.092	18.802	18.547
Rest	13.069	12.897	12.728	12.535	12.365
LN Zone 2					
First 200GJ of booked MDQ	270.674	266.739	262.845	258.475	254.813
Next 400GJ of booked MDQ	162.404	160.043	157.707	155.085	152.888
Next 1000GJ of booked MDQ	108.269	106.696	105.138	103.390	101.925
Next 2000GJ of booked MDQ	81.202	80.022	78.854	77.543	76.444
Rest	54.135	53.348	52.569	51.695	50.963
LN Zone 3					
First 200GJ of booked MDQ	600.534	587.729	575.111	561.677	549.971
Next 400GJ of booked MDQ	360.320	352.637	345.067	337.006	329.983
Next 1000GJ of booked MDQ	240.214	235.092	230.045	224.671	219.989
Next 2000GJ of booked MDQ	180.160	176.319	172.533	168.503	164.991
Rest	120.107	117.546	115.022	112.335	109.994

Prices exclude GST. GST will be added to all prices in accordance with clause 3.19 of the Access Arrangement

Wollongong

Local Network Unit Charge for Wollongong – $/GJ of MDQ per annum in real 2004/2005 dollars (GST Exclusive)

	Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
LN Zone 1					
First 200GJ of booked MDQ	16.168	16.045	15.765	15.853	16.145
Next 400GJ of booked MDQ	9.701	9.627	9.459	9.512	9.687
Next 1000GJ of booked MDQ	6.467	6.418	6.306	6.341	6.458
Next 2000GJ of booked MDQ	4.850	4.814	4.729	4.756	4.844
Rest	3.234	3.209	3.153	3.171	3.229
LN Zone 2					
First 200GJ of booked MDQ	108.668	108.025	106.315	107.086	109.248
Next 400GJ of booked MDQ	65.201	64.815	63.789	64.252	65.549
Next 1000GJ of booked MDQ	43.467	43.210	42.526	42.834	43.699
Next 2000GJ of booked MDQ	32.600	32.407	31.894	32.126	32.775
Rest	21.734	21.605	21.263	21.417	21.850
LN Zone 3					
First 200GJ of booked MDQ	1645.417	1652.783	1643.912	1673.638	1726.064
Next 400GJ of booked MDQ	987.250	991.670	986.347	1004.183	1035.639
Next 1000GJ of booked MDQ	658.167	661.113	657.565	669.455	690.426
Next 2000GJ of booked MDQ	493.625	495.835	493.174	502.091	517.819
Rest	329.083	330.557	328.782	334.728	345.213

Prices exclude GST. GST will be added to all prices in accordance with clause 3.19 of the Access Arrangement

OTHER NETWORK SECTIONS

The *Pressure Reduction Unit Charges*, GST exclusive, (expressed as $/GJ of MDQ_c per annum in real 2004/2005 dollars) are as follows:

Period ending 30 June 2006	12.545
Period ending 30 June 2007	12.506
Period ending 30 June 2008	12.159
Period ending 30 June 2009	11.852
Period ending 30 June 2010	11.595

The *Local Network Unit Charge* = Country Unit Charge x Distance

where:

Country Unit Charge, GST exclusive, (expressed as $ /GJ of MDQ_c per annum/km in real 2004/2005 dollars) is as follows:

Period ending 30 June 2006	34.172
Period ending 30 June 2007	33.826
Period ending 30 June 2008	33.481
Period ending 30 June 2009	33.034
Period ending 30 June 2010	32.672

LOCAL NETWORK THROUGHPUT CHARGES

Sydney

Sydney Local Network Throughput Charges ($/GJ) in real 2004/2005 dollars (GST Exclusive)

	Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
LN Zone 1	2.416	2.412	2.407	2.390	2.371
LN Zone 2	2.774	2.763	2.730	2.704	2.676
LN Zone 3	3.962	3.922	3.873	3.788	3.688
LN Zone 4	4.037	3.963	3.888	3.788	3.688
LN Zone 5	4.037	3.963	3.888	3.788	3.688

Prices exclude GST. GST will be added to all prices in accordance with clause 3.19 of the Access Arrangement

Newcastle/Central Coast

Newcastle/Central Coast Local Network Throughput Charges ($/GJ) in real 2004/2005 dollars (GST Exclusive)

	Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
LN Zone 1	1.074	1.060	1.046	1.030	1.016
LN Zone 2	4.037	3.963	3.888	3.788	3.688
LN Zone 3	4.037	3.963	3.888	3.788	3.688

Wollongong

Wollongong Local Network Throughput Charges ($/GJ) in real 2004/2005 dollars (GST Exclusive)

	Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
LN Zone 1	0.266	0.264	0.259	0.261	0.265
LN Zone 2	1.786	1.776	1.748	1.760	1.796
LN Zone 3	4.037	3.963	3.888	3.788	3.688

Prices exclude GST. GST will be added to all prices in accordance with clause 3.19 of the Access Arrangement

Other Network Sections

The Throughput Charge for other Network Sections, GST exclusive, expressed in real 2004/2005 dollars ($/GJ) are given in the Table below.

Other Network Sections LN Throughput Charges ($/GJ) in real 2004/2005 dollars (GST Exclusive)

Distance	Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
0.5	0.487	0.484	0.475	0.466	0.459
1	0.768	0.762	0.750	0.738	0.728
1.5	1.049	1.040	1.025	1.009	0.996
2	1.330	1.318	1.301	1.281	1.265
2.5	1.611	1.596	1.576	1.552	1.533
3	1.891	1.874	1.851	1.824	1.802
3.5	2.172	2.152	2.126	2.095	2.070
4	2.453	2.430	2.401	2.367	2.339
4.5	2.734	2.708	2.677	2.638	2.607
5	3.015	2.986	2.952	2.910	2.876
5.5	3.296	3.264	3.227	3.181	3.145
6	3.577	3.542	3.502	3.453	3.413
6.5	3.857	3.820	3.777	3.724	3.682
7 or greater	4.037	3.963	3.888	3.788	3.688

Prices exclude GST. GST will be added to all prices in accordance with clause 3.19 of the Access Arrangement

TRUNK CHARGES

The charge for each Trunk Zone ($/GJ MDQ per annum), GST exclusive, expressed in real 2004/2005 dollars is:

Trunk Charges – $/GJ of MDQ per annum expressed in real 2004/2005 dollars (GST Exclusive)

	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7
Year Ending 30 June 2006	2.885	4.481	5.808	28.246	31.579	35.661	62.829
Year Ending 30 June 2007	2.798	4.344	5.648	27.509	30.778	34.804	61.987
Year Ending 30 June 2008	2.704	4.195	5.475	26.886	30.109	34.139	60.204
Year Ending 30 June 2009	2.644	4.100	5.368	26.543	29.754	33.824	59.066
Year Ending 30 June 2010	2.584	4.004	5.262	26.170	29.361	33.467	58.210

TRUNK THROUGHPUT CHARGES

Trunk Throughput Charges ($/GJ) in real 2004/2005 dollars (GST Exclusive)

	Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
Zone 1	0.0474	0.0460	0.0444	0.0435	0.0425
Zone 2	0.0737	0.0714	0.0690	0.0674	0.0658
Zone 3	0.0955	0.0928	0.0900	0.0882	0.0865
Zone 4	0.4643	0.4522	0.4420	0.4363	0.4302
Zone 5	0.5191	0.5059	0.4949	0.4891	0.4826
Zone 6	0.5862	0.5721	0.5612	0.5560	0.5501
Zone 7	1.0328	1.019	0.9897	0.9709	0.9569

Prices exclude GST. GST will be added to all prices in accordance with clause 3.19 of the Access Arrangement

PROVISION OF BASIC METERING EQUIPMENT CHARGES

The Provision of Basic Metering Equipment Charges is determined on the basis of the type of metering device installed at the Delivery Point.

Meter Set Type Typical/Alternative Meter	**Provision of Basic Metering Equipment Charge in $ per annum expressed in real 2004/2005 dollars (GST Exclusive)**				
	Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
Single Run & Bypass					
AL-425	684	682	677	682	688
AL-800/AL-1000/AL-1400	1,433	1,427	1,418	1,427	1,441
AL-2300/Roots3M/Instromet G65	1,992	1,985	1,972	1,984	2,004
Romet RM140/AL-5000/ Roots 5M/Instromet G100	2,405	2,395	2,380	2,395	2,418
Roots 7M/Instromet G160	3,678	3,664	3,640	3,663	3,699
Roots 11M/Roots 16M/Instromet G250	4,394	4,377	4,349	4,376	4,419
Singer 4GT/Rockwell AT-18/ Instromet G400	5,213	5,194	5,160	5,192	5,243
Singer 6GT/Rockwell AT-30	7,485	7,457	7,409	7,454	7,528
Singer 8GT/Rockwell AT-60	8,862	8,828	8,772	8,826	8,913
Singer 12GT	15,200	15,143	15,046	15,138	15,288
Double Run (& Bypass)					
AL-2300	3,982	3,967	3,942	3,966	4,005
AL-5000/Roots 5M/Instromet G100	4,778	4,760	4,730	4,759	4,806
Roots 7M/Instromet G160	6,985	6,959	6,914	6,957	7,025
Roots 16M/Roots 11M/ Instromet G250/Instromet G400	8,092	8,061	8,010	8,059	8,138
Singer 4GT/Rockwell AT-18	9,771	9,734	9,672	9,731	9,827
Singer 6GT/Rockwell AT-30	13,796	13,744	13,656	13,739	13,875
Singer 8GT/Rockwell AT-60	17,121	17,057	16,947	17,051	17,219
Singer 12GT/Rockwell T140/ Instromet 12”G4000	28,668	28,560	28,377	28,551	28,833
Double Run & Shunt (Shunt Meter to size)					
6GT + S	15,371	15,313	15,215	15,308	15,459
8GT + S	18,947	18,876	18,755	18,870	19,056
12GT + S	31,813	31,693	31,490	31,683	31,995
Single Run & Shunt or Double Run (different Meters) – requiring special charges					
Roots 7M + AL425/ Instromet G160 +AL 425	4,228	4,212	4,185	4,211	4,253
Roots 16M + AL1400/ Instromet G400 +AL 1400	5,382	5,362	5,327	5,360	5,413
4GT + AL1400	8,286	8,255	8,202	8,252	8,334
6GT + AL 1400	8,346	8,315	8,261	8,312	8,394
6GT + AL5000	9,011	8,978	8,920	8,975	9,063

Prices exclude GST. GST will be added to all prices in accordance with clause 3.19 of the Access Arrangement

PROVISION OF ON-SITE DATA AND COMMUNICATION EQUIPMENT CHARGE

Provision of On-Site Data and Communication Equipment Charge ($ p.a.) In real 2004/2005 dollars (GST Exclusive)					
Meter Reading Cycle	Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
Charge per Delivery Station (includes the first 2 meters at a Delivery Station)	901	897	888	894	903
Charge for each additional 1 or 2 meters at a Delivery Station	213	213	211	212	214

PROVISION OF METER READING CHARGE

Provision of Meter Reading Charge for Non-Tariff Delivery Points ($ p.a.) In real 2004/2005 dollars (GST Exclusive)					
	Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
Charge per Delivery Station (includes the first 2 meters at a Delivery Station)	483	482	477	479	484
Charge for each additional 1 or 2 meters at a Delivery Station	115	114	112	113	115

CAPPED RATES

The annual quantity block structure and relevant capped rate in real 2004/2005 dollars (GST exclusive) are:

Annual Quantity Block Structure	Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
First 20 TJ p.a.	3.67	3.60	3.53	3.44	3.35
Next 30 TJ p.a.	2.99	2.93	2.88	2.80	2.73
All additional	2.53	2.48	2.44	2.37	2.31

Prices exclude GST. GST will be added to all prices in accordance with clause 3.19 of the Access Arrangement

TARIFF DELIVERY POINTS

TARIFF THROUGHPUT CHARGES

The Throughput Charges for the Tariff Service, GST exclusive, in real 2004/2005 dollars are:

Throughput Charge for Tariff Service ($/GJ) in real 2004/2005 dollars (GST Exclusive)

Block Size (GJ per month)	Block Size (GJ Per Qtr)	Year Ending 30 June 2006 ($ per GJ)	Year Ending 30 June 2007 ($ per GJ)	Year Ending 30 June 2008 ($ per GJ)	Year Ending 30 June 2009 ($ per GJ)	Year Ending 30 June 2010 ($ per GJ)
First 1.25	First 3.75	8.553	8.522	8.512	8.503	8.495
Next 1.5	Next 4.5	5.608	5.419	5.229	5.021	4.818
Next 5.75	Next 17.25	5.382	5.201	5.019	4.819	4.624
Next 75	Next 225	5.260	5.083	4.905	4.710	4.519
Next 333.5	Next 1000.5	4.550	4.397	4.243	4.074	3.909
All additional	All additional	3.420	3.305	3.189	3.062	2.938

The Fixed Charges for the Tariff Service per annum, GST exclusive, in real 2004/2005 dollars are:

Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
42.893	42.738	42.688	42.643	42.602

TRUNK TARIFF CHARGE

Charge for Trunk Tariff Service ($/GJ) in real 2004/2005 dollars (GST Exclusive)

Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
0.1810	0.1747	0.1706	0.1690	0.1671

Prices exclude GST. GST will be added to all prices in accordance with clause 3.19 of the Access Arrangement

PROVISION OF BASIC METERING EQUIPMENT CHARGES

Provision of Basic Metering Equipment Charge per annum in real 2004/2005 dollars (GST Exclusive)					
Meter Provision Charges	Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
For meters with capacity less than or equal to 6m3/hr ($ p.a.)	18.971	20.432	21.648	23.219	24.718
For meters with a capacity of greater than 6m3/hr ($/GJ)	0.205	0.222	0.237	0.255	0.272

The Provision of Basic Metering Equipment Charge is payable each billing period. For meters with a capacity greater than 6m3/hr there is a minimum charge payable each billing period. This minimum charge in real 2004/2005 dollars, GST exclusive is $3.40 per monthly billing period and $10.24 per quarterly billing period.

PROVISION OF METER READING CHARGE

The Provision of Meter Reading Charge is payable each billing period.

Provision of Meter Reading Charge for Tariff Delivery Points ($ p.a.) in real 2004/2005 dollars (GST Exclusive)					
Meter Reading Cycle	Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
Quarterly	2.877	2.781	2.690	2.644	2.608
Monthly	32.138	31.074	30.058	29.536	29.139

CHARGES FOR ANCILLARY SERVICES

	GST exclusive (2004/2005 dollars)
Request for Service	$60, plus $60 per hour after the first hour
Special meter read	$25
Residential Disconnection fee	$75
Business Disconnection fee	$300

Prices exclude GST. GST will be added to all prices in accordance with clause 3.19 of the Access Arrangement

AGL GAS NETWORKS

Addendum to AGL Gas Networks Access Arrangement for NSW

Schedule of Prices in 2005/2006 Dollars

Exclusive of GST

Effective 1 July, 2005

This addendum is for information purposes only and does not form part of the Access Arrangement. This addendum is to be read in conjunction with Section 3 of the Access Arrangement. All charges in this addendum are exclusive of GST and expressed in 2005/2006 dollars.

NON TARIFF DELIVERY POINTS

LOCAL NETWORK CHARGES

The Local Network Unit Charges, GST exclusive, expressed in real 2005/2006 dollars ($GJ/MDQ per annum) for the LN Zones in the Sydney, Newcastle/Central Coast and Wollongong areas are:

Sydney

Local Network Unit Charge for Sydney – $/GJ of MDQ per annum in real 2005/2006 dollars (GST Exclusive)

	Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
LN Zone 1					
First 200GJ of booked MDQ	150.445	150.179	149.885	148.790	147.631
Next 400GJ of booked MDQ	90.266	90.107	89.931	89.274	88.579
Next 1000GJ of booked MDQ	60.178	60.071	59.954	59.516	59.052
Next 2000GJ of booked MDQ	45.134	45.054	44.966	44.637	44.289
Rest	30.089	30.036	29.977	29.758	29.526
LN Zone 2					
First 200GJ of booked MDQ	172.682	171.999	169.986	168.338	166.587
Next 400GJ of booked MDQ	103.609	103.200	101.992	101.003	99.952
Next 1000GJ of booked MDQ	69.073	68.800	67.994	67.335	66.635
Next 2000GJ of booked MDQ	51.804	51.600	50.996	50.502	49.977
Rest	34.536	34.400	33.998	33.668	33.317

Prices exclude GST. GST will be added to all prices in accordance with clause 3.19 of the Access Arrangement

Sydney

Local Network Unit Charge for Sydney – $/GJ of MDQ per annum in real 2005/2006 dollars (GST Exclusive)

	Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
LN Zone 3					
First 200GJ of booked MDQ	246.695	244.184	241.123	237.464	233.867
Next 400GJ of booked MDQ	148.017	146.510	144.675	142.478	140.321
Next 1000GJ of booked MDQ	98.678	97.673	96.449	94.985	93.547
Next 2000GJ of booked MDQ	74.009	73.255	72.337	71.239	70.160
Rest	49.339	48.837	48.224	47.493	46.773
LN Zone 4					
First 200GJ of booked MDQ	428.605	422.658	416.787	408.959	401.029
Next 400GJ of booked MDQ	257.164	253.595	250.071	245.376	240.618
Next 1000GJ of booked MDQ	171.443	169.063	166.714	163.584	160.412
Next 2000GJ of booked MDQ	128.582	126.797	125.036	122.688	120.308
Rest	85.721	84.532	83.357	81.792	80.206
LN Zone 5					
First 200GJ of booked MDQ	2409.658	2375.761	2342.016	2296.316	2250.000
Next 400GJ of booked MDQ	1445.794	1425.456	1405.209	1377.790	1350.000
Next 1000GJ of booked MDQ	963.864	950.305	936.806	918.526	900.000
Next 2000GJ of booked MDQ	722.898	712.729	702.605	688.895	675.001
Rest	481.932	475.152	468.403	459.264	450.000

Prices exclude GST. GST will be added to all prices in accordance with clause 3.19 of the Access Arrangement

Newcastle/Central Coast

Local Network Unit Charge for Newcastle/Central Coast – $/GJ of MDQ per annum in real 2005/2006 dollars (GST Exclusive)

	Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
LN Zone 1					
First 200GJ of booked MDQ	66.877	65.997	65.132	64.142	63.273
Next 400GJ of booked MDQ	40.126	39.598	39.079	38.485	37.965
Next 1000GJ of booked MDQ	26.751	26.399	26.053	25.657	25.310
Next 2000GJ of booked MDQ	20.062	19.799	19.540	19.243	18.982
Rest	13.375	13.199	13.026	12.829	12.655
LN Zone 2					
First 200GJ of booked MDQ	277.019	272.991	269.006	264.534	260.786
Next 400GJ of booked MDQ	166.211	163.794	161.404	158.720	156.472
Next 1000GJ of booked MDQ	110.807	109.197	107.602	105.813	104.314
Next 2000GJ of booked MDQ	83.105	81.898	80.702	79.361	78.236
Rest	55.404	54.598	53.801	52.907	52.158
LN Zone 3					
First 200GJ of booked MDQ	614.611	601.505	588.592	574.843	562.862
Next 400GJ of booked MDQ	368.766	360.903	353.155	344.905	337.718
Next 1000GJ of booked MDQ	245.845	240.603	235.437	229.937	225.146
Next 2000GJ of booked MDQ	184.383	180.452	176.577	172.453	168.858
Rest	122.922	120.301	117.718	114.968	112.572

Prices exclude GST. GST will be added to all prices in accordance with clause 3.19 of the Access Arrangement

Wollongong

Local Network Unit Charge for Wollongong – $/GJ of MDQ per annum in real 2005/2006 dollars (GST Exclusive)

	Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
LN Zone 1					
First 200GJ of booked MDQ	16.547	16.421	16.135	16.225	16.523
Next 400GJ of booked MDQ	9.928	9.853	9.681	9.735	9.914
Next 1000GJ of booked MDQ	6.619	6.568	6.454	6.490	6.609
Next 2000GJ of booked MDQ	4.964	4.927	4.840	4.867	4.958
Rest	3.310	3.284	3.227	3.245	3.305
LN Zone 2					
First 200GJ of booked MDQ	111.215	110.557	108.807	109.596	111.809
Next 400GJ of booked MDQ	66.729	66.334	65.284	65.758	67.085
Next 1000GJ of booked MDQ	44.486	44.223	43.523	43.838	44.723
Next 2000GJ of booked MDQ	33.364	33.167	32.642	32.879	33.543
Rest	22.243	22.111	21.761	21.919	22.362
LN Zone 3					
First 200GJ of booked MDQ	1683.986	1691.524	1682.445	1712.868	1766.523
Next 400GJ of booked MDQ	1010.391	1014.915	1009.467	1027.721	1059.914
Next 1000GJ of booked MDQ	673.594	676.609	672.978	685.147	706.610
Next 2000GJ of booked MDQ	505.196	507.457	504.734	513.860	529.957
Rest	336.797	338.305	336.489	342.574	353.305

Prices exclude GST. GST will be added to all prices in accordance with clause 3.19 of the Access Arrangement

OTHER NETWORK SECTIONS

The *Pressure Reduction Unit Charges*, GST exclusive, (expressed as $/GJ of MDQ_c per annum in real 2005/2006 dollars) are as follows:

Period ending 30 June 2006	12.839
Period ending 30 June 2007	12.799
Period ending 30 June 2008	12.444
Period ending 30 June 2009	12.130
Period ending 30 June 2010	11.867

The *Local Network Unit Charge* = Country Unit Charge x Distance

where:

Country Unit Charge, GST exclusive, (expressed as $ /GJ of MDQ_c per annum/km in real 2005/2006 dollars) is as follows:

Period ending 30 June 2006	34.973
Period ending 30 June 2007	34.619
Period ending 30 June 2008	34.266
Period ending 30 June 2009	33.808
Period ending 30 June 2010	33.438

LOCAL NETWORK THROUGHPUT CHARGES

Sydney

Sydney Local Network Throughput Charges ($/GJ) in real 2005/2006 dollars (GST Exclusive)

	Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
LN Zone 1	2.473	2.469	2.463	2.446	2.427
LN Zone 2	2.839	2.828	2.794	2.767	2.739
LN Zone 3	4.055	4.014	3.964	3.877	3.775
LN Zone 4	4.132	4.055	3.979	3.877	3.775
LN Zone 5	4.132	4.055	3.979	3.877	3.775

Prices exclude GST. GST will be added to all prices in accordance with clause 3.19 of the Access Arrangement

Newcastle/Central Coast

Newcastle/Central Coast Local Network Throughput Charges ($/GJ) in real 2005/2006 dollars (GST Exclusive)

	Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
LN Zone 1	1.099	1.085	1.071	1.054	1.040
LN Zone 2	4.132	4.055	3.979	3.877	3.775
LN Zone 3	4.132	4.055	3.979	3.877	3.775

Wollongong

Wollongong Local Network Throughput Charges ($/GJ) in real 2005/2006 dollars (GST Exclusive)

	Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
LN Zone 1	0.272	0.270	0.265	0.267	0.271
LN Zone 2	1.828	1.818	1.789	1.801	1.838
LN Zone 3	4.132	4.055	3.979	3.877	3.775

Prices exclude GST. GST will be added to all prices in accordance with clause 3.19 of the Access Arrangement

Other Network Sections

The Throughput Charge for other Network Sections, GST exclusive, expressed in real 2005/2006 dollars ($/GJ) are given in the Table below.

Other Network Sections LN Throughput Charges ($/GJ) in real 2005/2006 dollars (GST Exclusive)

Distance	Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
0.5	0.498	0.495	0.486	0.477	0.470
1	0.786	0.780	0.768	0.755	0.745
1.5	1.074	1.064	1.049	1.033	1.019
2	1.361	1.349	1.331	1.311	1.295
2.5	1.649	1.633	1.613	1.588	1.569
3	1.935	1.918	1.894	1.867	1.844
3.5	2.223	2.202	2.176	2.144	2.119
4	2.510	2.487	2.457	2.422	2.394
4.5	2.798	2.771	2.740	2.700	2.668
5	3.086	3.056	3.021	2.978	2.943
5.5	3.373	3.341	3.303	3.256	3.219
6	3.661	3.625	3.584	3.534	3.493
6.5	3.947	3.910	3.866	3.811	3.768
7 or greater	4.132	4.055	3.979	3.877	3.775

Prices exclude GST. GST will be added to all prices in accordance with clause 3.19 of the Access Arrangement

TRUNK CHARGES

The charge for each Trunk Zone ($/GJ MDQ per annum), GST exclusive, expressed in real 2005/2006 dollars is:

Trunk Charges – $/GJ of MDQ per annum expressed in real 2005/2006 dollars (GST Exclusive)

	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7
Year Ending 30 June 2006	2.953	4.586	5.944	28.908	32.319	36.497	64.302
Year Ending 30 June 2007	2.864	4.446	5.780	28.154	31.499	35.620	63.440
Year Ending 30 June 2008	2.767	4.293	5.603	27.516	30.815	34.939	61.615
Year Ending 30 June 2009	2.706	4.196	5.494	27.165	30.451	34.617	60.451
Year Ending 30 June 2010	2.645	4.098	5.385	26.783	30.049	34.251	59.574

TRUNK THROUGHPUT CHARGES

Trunk Throughput Charges ($/GJ) in real 2005/2006 dollars (GST Exclusive)

	Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
Zone 1	0.0485	0.0471	0.0454	0.0445	0.0435
Zone 2	0.0754	0.0731	0.0706	0.0690	0.0673
Zone 3	0.0977	0.0950	0.0921	0.0903	0.0885
Zone 4	0.4752	0.4628	0.4524	0.4465	0.4403
Zone 5	0.5313	0.5178	0.5065	0.5006	0.4939
Zone 6	0.5999	0.5855	0.5744	0.5690	0.5630
Zone 7	1.0570	1.0429	1.0129	0.9937	0.9793

Prices exclude GST. GST will be added to all prices in accordance with clause 3.19 of the Access Arrangement

PROVISION OF BASIC METERING EQUIPMENT CHARGES

The Provision of Basic Metering Equipment Charges is determined on the basis of the type of metering device installed at the Delivery Point.

Meter Set Type Typical/Alternative Meter	**Provision of Basic Metering Equipment Charge in $ per annum expressed in real 2005/2006 dollars (GST Exclusive)**				
	Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
Single Run & Bypass					
AL-425	700	698	693	698	704
AL-800/AL-1000/AL-1400	1,467	1,460	1,451	1,460	1,475
AL-2300/Roots3M/Instromet G65	2,039	2,032	2,018	2,031	2,051
Romet RM140/AL-5000/Roots 5M/Instromet G100	2,461	2,451	2,436	2,451	2,475
Roots 7M/Instromet G160	3,764	3,750	3,725	3,749	3,786
Roots 11M/Roots 16M/Instromet G250	4,497	4,480	4,451	4,479	4,523
Singer 4GT/Rockwell AT-18/ Instromet G400	5,335	5,316	5,281	5,314	5,366
Singer 6GT/Rockwell AT-30	7,660	7,632	7,583	7,629	7,704
Singer 8GT/Rockwell AT-60	9,070	9,035	8,978	9,033	9,122
Singer 12GT	15,556	15,498	15,399	15,493	15,646
Double Run (& Bypass)					
AL-2300	4,075	4,060	4,034	4,059	4,099
AL-5000/Roots 5M/Instromet G100	4,890	4,872	4,841	4,871	4,919
Roots 7M/Instromet G160	7,149	7,122	7,076	7,120	7,190
Roots 16M/Roots 11M/ Instromet G250/Instromet G400	8,282	8,250	8,198	8,248	8,329
Singer 4GT/Rockwell AT-18	10,000	9,962	9,899	9,959	10,057
Singer 6GT/Rockwell AT-30	14,119	14,066	13,976	14,061	14,200
Singer 8GT/Rockwell AT-60	17,522	17,457	17,344	17,451	17,623
Singer 12GT/Rockwell T140/ Instromet 12”G4000	29,340	29,229	29,042	29,220	29,509
Double Run & Shunt (Shunt Meter to size)					
6GT + S	15,731	15,672	15,572	15,667	15,821
8GT + S	19,391	19,318	19,195	19,312	19,503
12GT + S	32,559	32,436	32,228	32,426	32,745
Single Run & Shunt or Double Run (different Meters) – requiring special charges					
Roots 7M + AL425/ Instromet G160 +AL 425	4,327	4,311	4,283	4,310	4,353
Roots 16M + AL1400/ Instromet G400 +AL 1400	5,508	5,488	5,452	5,486	5,540
4GT + AL1400	8,480	8,448	8,394	8,445	8,529
6GT + AL 1400	8,542	8,510	8,455	8,507	8,591
6GT + AL5000	9,222	9,188	9,129	9,185	9,275

Prices exclude GST. GST will be added to all prices in accordance with clause 3.19 of the Access Arrangement

PROVISION OF ON-SITE DATA AND COMMUNICATION EQUIPMENT CHARGE

Provision of On-Site Data and Communication Equipment Charge ($ p.a.) In real 2005/2006 dollars (GST Exclusive)					
Meter Reading Cycle	Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
Charge per Delivery Station (includes the first 2 meters at a Delivery Station)	922	918	909	915	924
Charge for each additional 1 or 2 meters at a Delivery Station	218	218	216	217	219

PROVISION OF METER READING CHARGE

Provision of Meter Reading Charge for Non-Tariff Delivery Points ($ p.a.) In real 2005/2006 dollars (GST Exclusive)					
	Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
Charge per Delivery Station (includes the first 2 meters at a Delivery Station)	494	493	488	490	495
Charge for each additional 1 or 2 meters at a Delivery Station	118	117	115	116	118

CAPPED RATES

The annual quantity block structure and relevant capped rate in real 2005/2006 dollars (GST exclusive) are:

Annual Quantity Block Structure	Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
First 20 TJ p.a.	3.76	3.69	3.62	3.52	3.43
Next 30 TJ p.a.	3.06	3.00	2.94	2.87	2.79
All additional	2.59	2.54	2.49	2.43	2.37

Prices exclude GST. GST will be added to all prices in accordance with clause 3.19 of the Access Arrangement

TARIFF DELIVERY POINTS

TARIFF THROUGHPUT CHARGES

The Throughput Charges for the Tariff Service, GST exclusive, in real 2005/2006 dollars are:

Throughput Charge for Tariff Service ($/GJ) in real 2005/2006 dollars (GST Exclusive)

Block Size (GJ per month)	Block Size (GJ Per Qtr)	Year Ending 30 June 2006 ($ per GJ)	Year Ending 30 June 2007 ($ per GJ)	Year Ending 30 June 2008 ($ per GJ)	Year Ending 30 June 2009 ($ per GJ)	Year Ending 30 June 2010 ($ per GJ)
First 1.25	First 3.75	8.753	8.722	8.712	8.702	8.694
Next 1.5	Next 4.5	5.739	5.546	5.352	5.139	4.931
Next 5.75	Next 17.25	5.508	5.323	5.136	4.932	4.732
Next 75	Next 225	5.383	5.202	5.020	4.820	4.625
Next 333.5	Next 1000.5	4.657	4.500	4.343	4.170	4.001
All additional	All additional	3.500	3.382	3.264	3.134	3.007

The Fixed Charges for the Tariff Service per annum, GST exclusive, in real 2005/2006 dollars are:

Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
43.899	43.740	43.688	43.642	43.601

TRUNK TARIFF CHARGE

Charge for Trunk Tariff Service ($/GJ) in real 2005/2006 dollars (GST Exclusive)

Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
0.1853	0.1788	0.1746	0.1730	0.1710

Prices exclude GST. GST will be added to all prices in accordance with clause 3.19 of the Access Arrangement

PROVISION OF BASIC METERING EQUIPMENT CHARGES

Provision of Basic Metering Equipment Charge per annum in real 2005/2006 dollars (GST Exclusive)					
Meter Provision Charges	Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
For meters with capacity less than or equal to 6m3/hr ($ p.a.)	19.416	20.911	22.155	23.763	25.298
For meters with a capacity of greater than 6m3/hr ($/GJ)	0.210	0.227	0.242	0.261	0.279

The Provision of Basic Metering Equipment Charge is payable each billing period. For meters with a capacity greater than 6m3/hr there is a minimum charge payable each billing period. This minimum charge in real 2005/2006 dollars, GST exclusive is $3.49 per monthly billing period and $10.48 per quarterly billing period.

PROVISION OF METER READING CHARGE

The Provision of Meter Reading Charge is payable each billing period.

Provision of Meter Reading Charge for Tariff Delivery Points ($ p.a.) in real 2005/2006 dollars (GST Exclusive)					
Meter Reading Cycle	Year Ending 30 June 2006	Year Ending 30 June 2007	Year Ending 30 June 2008	Year Ending 30 June 2009	Year Ending 30 June 2010
Quarterly	2.944	2.847	2.753	2.706	2.669
Monthly	32.891	31.802	30.762	30.228	29.822

CHARGES FOR ANCILLARY SERVICES

	GST exclusive (2005/2006 dollars)
Request for Service	$61.41, plus $61.41 per hour after the first hour
Special meter read	$25.59
Residential Disconnection fee	$76.76
Business Disconnection fee	$307.03

Prices exclude GST. GST will be added to all prices in accordance with clause 3.19 of the Access Arrangement

AGL GAS NETWORKS

Access Arrangement Information for NSW Network

June 2005

AGL Gas Networks Limited
ACN 003 004 322
ABN 87 003 004 322

AGL GAS NETWORKS LIMITED

ACCESS ARRANGEMENT INFORMATION FOR NSW NETWORK

TABLE OF CONTENTS

1. INTRODUCTION

This Access Arrangement Information (AAI) for AGL Gas Networks Limited (AGLGN) contains information intended to enable Users and Prospective Users to understand the derivation of the elements of the Access Arrangement (AA) and should be read in conjunction with the Access Arrangement for AGLGN.

The information is presented under the following sections:

Section 2	Access and Pricing Principles
Section 3	Demand Forecasts
Section 4	Capital Costs
Section 5	Non Capital Costs
Section 6	Total Revenue
Section 7	Cost Allocation to Contract and Tariff
Section 8	Revenue Allocation and Pricing Structures
Section 9	System Capacity and Volume Assumptions
Section 10	Key Performance Indicators

Further information is provided in the following attachments:

Attachment 1	Maps of the System
Attachment 2	Extent of AGLGN Networks
Attachment 3	Assessment Ratings for Postcodes
Attachment 4	Index of National Access Code Attachment A to this Access Arrangement Information
Attachment 5	Asset Valuation of Trunk Zones and Distribution System Regions

Section 2.28A of the Code permits the Regulator to agree that proposed revisions to the AA and AAI may have the effect of applying the revised AA to one or more other Covered Pipelines that have the same Relevant Regulator and Service Provider as the Covered Pipeline to which the proposed revisions and Access Arrangement Information relate. The AGL New South Wales distribution system and the AGL Central West System have the same Relevant Regulator and Service Provider.

AGLGN relies on Section 2.28A of the Code to treat the following pipelines as a single Covered Pipeline:

- The AGL New South Wales distribution system; and
- The AGL Central West distribution system.
- Wilton to Newcastle transmission pipeline.
- Wilton to Wollongong transmission pipeline.

In this document, the transmission pipelines are also referred to as trunks, while the distribution system is also referred to as local network.

2. ACCESS AND PRICING PRINCIPLES

2.1. Tariff Determination Methodology

The Reference Tariffs in the Access Arrangement for AGLGN have been derived using a cost of service model. The Total Revenue is calculated in accordance with Section 8 of the Code. AGLGN will be able to recover the forecast cost of services if the network achieves its forecast growth and allowed operating costs.

The services provided in the Access Arrangement for AGLGN comprise seven Reference Services, and two Non-Reference Services. These services must be taken separately for the Trunks and Local Networks (except the Meter Data Service which is only available with Local Network reference Services and the Gas Swap Service which is only available to Users of Trunk Reference Services), and the services must be linked. The services are as follows:

i. Reference Services

Capacity Reservation Service: A Capacity Reservation Service is a service for the transportation of gas by AGLGN from the Receipt Point to a single non-tariff Delivery Point. Charges are determined on the basis of capacity reserved.

There are two additional capacity reservation options being offered by AGLGN:

- ***Summer Tranche option:*** This provides an option to book capacity between the months of October and April (inclusive). Trunk and Local Network charges apply to the extra tranche;

- ***Short Term Capacity option:*** Available to end use customers using gas primarily for the production of goods (subject to available capacity). Two options apply: one for 30 TJ or less of gas per year, the other for over 30 TJ. A Short Term Capacity Charge (premium) may be charged for the under 30 TJ option, and the charge will apply to both the Trunk and Local Network services.

Managed Capacity Service*:* A Managed Capacity Service is a service for the transportation of gas by AGLGN from the Receipt Point to a single non-tariff Delivery Point. Charges are determined on the basis of capacity reserved.

Throughput Service: A Throughput Service is a service for the transportation of gas by AGLGN from the Receipt Point to a single non-tariff Delivery Point. Charges are determined on the basis of throughput.

Multiple Delivery Point Service: A Multiple Delivery Point Service is a service for the transportation of gas by AGLGN from the Receipt Point to a number of non-tariff Delivery Points. Charges are based on the relevant service at each Delivery Point.

Tariff Service: A Tariff Service is a service for the transportation of gas by AGLGN from the Receipt Point to one or more Tariff Delivery Points. Charges are determined on the basis of throughput.

Meter Data Service: Meter Data Service is a service comprising the reading of meters and handling of metering data.

Gas Swap Services: Gas Swap Service is a service which entitles Users of Trunk Reference Services to have gas delivered at an alternative Receipt Point on a Day, or transfer gas from one User to another User.

Diversified MDQ: Diversified MDQ is defined as the non-coincidental Maximum Daily Quantities of gas consumption.

Coastal region: The coastal networks encompass the AGLGN coastal metropolitan networks (i.e. Greater Sydney, Newcastle / Central Coast and Wollongong).

Country region: All other NSW networks (other than coastal).

(ii) Non-Reference Services

Interconnection of Embedded Network Services: Interconnection of Embedded Network Services is a service provided by AGLGN for the establishment of a single Delivery Point for an embedded network on either the Trunk or Local Network.

Negotiated Services: An agreement to meet specific needs of users, which are not met by Reference Services or Interconnection of Embedded Network Services.

2.1.1. Local Network Charges

Local Network Charges are based on pricing zones, which are defined by groupings of postcodes. Sydney has five pricing zones, while Wollongong and Newcastle each have three.

The determination of the Reference Tariffs for the above transportation services involve the following broad steps:

- The capital and operating and maintenance costs relating to the network assets are divided into cost pools based on defined asset groups;
- Customer classes are specified on consumption levels i.e. Contract and Tariff customers;
- The cost pools are allocated to the customer classes based on relative usage of those defined asset groups by the relevant customer classes;
- The Reference Tariffs are designed to recover the Total Revenue allocated to each customer class based on the forecast network utilisation after having taken into account prices applied to Decrement customers.

Reference Tariffs in each year of the Access Arrangement for AGLGN are determined from the Total Revenue. The Total Revenue is determined by the following approach:

- The cost of services over the Access Arrangement period are based on rate of return, the rolling forward of the Initial Capital Base, depreciation, forecast New Facilities Investment and non-capital costs; and
- Is calculated as the sum of:

  - a return on the capital base
  - a return on working capital

- depreciation of the capital base
- non-capital costs.

The Total Revenue is then smoothed to achieve price stability over the Access Arrangement period.

2.2. Cost Allocation Approach

Details of the allocation approach are given in Section 7 of this Access Arrangement Information.

2.3. Incentive Structures

In accordance with the principles of the Code:

- Reference Tariffs are based on the efficient cost (or anticipated efficient cost) of providing the Reference Services.
- Reference Tariffs are designed to provide a market-based incentive to improve efficiency and to promote efficient growth of the gas market. Tariffs have been designed to provide AGLGN with the ability to earn profits that vary around the profits anticipated in this submission, if it outperforms (or under-performs) against the benchmarks adopted in setting the Reference Tariffs.

The Reference Tariffs are structured to achieve the following incentives:

- Incentives for efficiency: If AGLGN is able to achieve cost outcomes (operating and capital) below forecast levels (including the cost of UAG), while maintaining service standards, it will retain the benefits of such efficiency improvements over the Access Arrangement period;
- Incentives to grow the market: Incentives exist for AGLGN to increase load growth in the Contract market segment and to expand the Tariff market segment. Prices have been calculated on the basis of a set of revenue and growth projections. If growth turns out to be stronger than forecast, the benefit is retained by AGLGN until the next regulatory review;
- Incentives for contract customers: Individual customers have an incentive to reduce their delivered price of gas if they reduce or control their peak demand on the system or if they increase their annual consumption without exceeding their nominated contract MDQ or maximum meter flow rate.

3. DEMAND FORECASTS

The demand forecast is a key component of the analysis underlying much of this AA and AAI. The demand forecast is used to determine:

- The market expansion capital expenditure forecast;
- The system reinforcement capital expenditure forecast;
- The efficient level of non-capital cost;
- The allocation of costs to various market segments and reference services;
- The determination of reference tariffs for each reference service.

As a consequence, the validity of this AA and AAI is dependent upon the consistency of the various inputs, particularly the demand forecast. It is therefore not possible to change one assumption or forecast in isolation without considering the impact of that change upon the integrity of the entire analysis.

The Demand Forecast is divided into a number of components:

- A forecast of incremental customer numbers
- A forecast of annual demand for the tariff market
- A forecast of annual demand (ACQ) and Maximum Daily Quantity (MDQ) for the contract market
- A forecast of ACQ and MDQ for each of the pipelines and asset components covered in the AA Submission

In assessing the demand forecasts for AGLGN it should be noted that although the tariff market segment represents approximately 33% of the throughput on the network, it generates over 88% of the revenue and is responsible for almost all of the load growth and capital expenditure requirements.

3.1. Incremental Customer Site Numbers

Forecast customer numbers are determined by first referencing the BIS Shrapnel forecast of underlying housing demand in the NSW market.

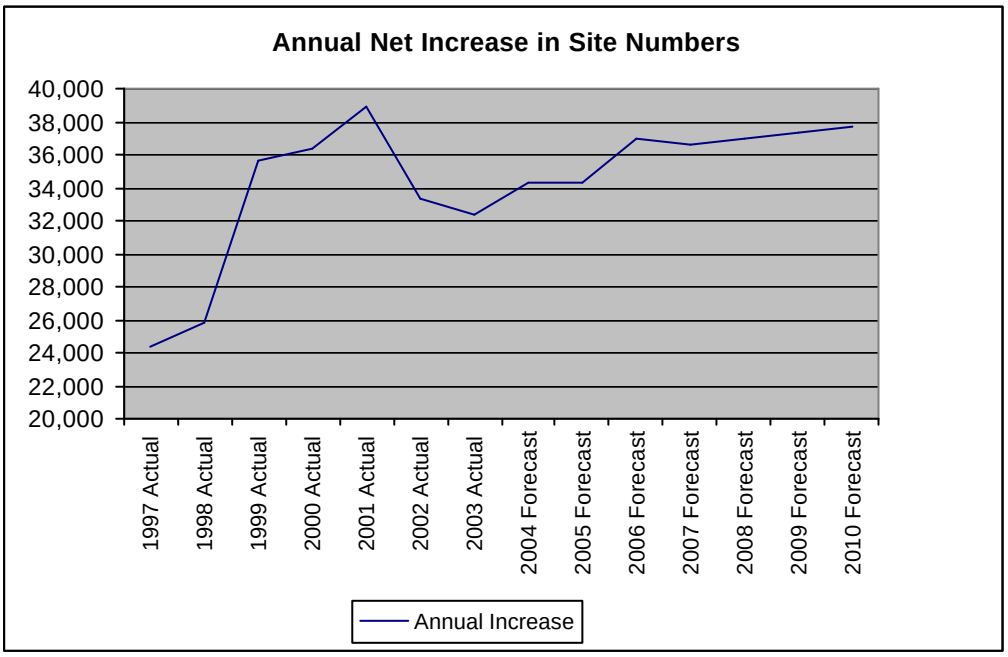
This forecast is then divided into various market categories and projections are made for each category based on AGLGN's experience in each category. To this is added AGLGN's estimate of existing homes converting from electricity to gas (E to G's) and new development in gas distribution project areas.

The Customer Sites as per the Final Decision 2005 can be summarised as:

Table 3.1 Actual & Forecast Customer Site Numbers

Year Ending June	Annual Increase	Numbers As At June 30
1996 Actual		666,204
1997 Actual	24,324	690,528
1998 Actual	25,798	716,326
1999 Actual	35,635	751,961
2000 Actual	36,353	788,314
2001 Actual	38,862	827,176
2002 Actual	33,359	860,535
2003 Actual	32,384	892,919
2004 Forecast	34,297	927,216
2005 Forecast	34,338	961,554
2006 Forecast	36,941	998,495
2007 Forecast	36,663	1,035,158
2008 Forecast	37,008	1,072,166
2009 Forecast	37,309	1,109,475
2010 Forecast	37,680	1,147,155

Graph 3.2 Actual & Forecast Customer Site Numbers



3.2. Tariff Market Demand Forecast

3.2.1. Summary of Tariff Demand Forecast

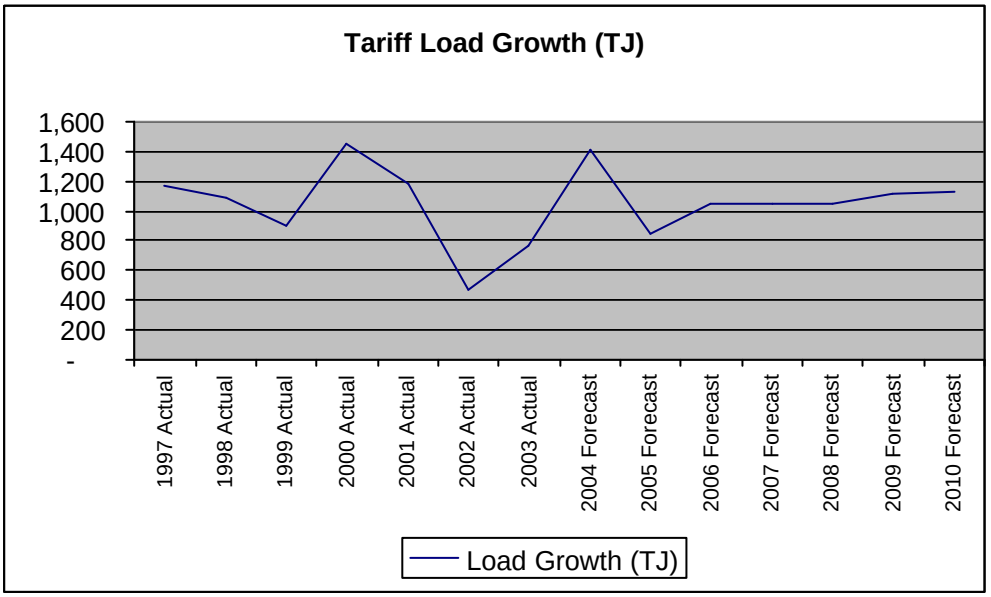
The Tariff Demand as per the Final Decision 2005 can be summarised as:

Table 3.3 Tariff Actual & Forecast Load

Year Ending June	Load Growth (TJ)	Total Load (TJ)
1996 Actual	-	23,735
1997 Actual	1,167	24,902
1998 Actual	1,094	25,996
1999 Actual	900	26,896
2000 Actual	1,449	28,345
2001 Actual	1,188	29,533
2002 Actual	471	30,004
2003 Actual	760	30,764
2004 Forecast	1,409	32,173
2005 Forecast	841	33,014
2006 Forecast	1,093	34,107
2007 Forecast	1,028	35,135
2008 Forecast	1,067	36,202
2009 Forecast	1,123	37,325
2010 Forecast	1,144	38,469

Note:
The growth in Business Tariff Load Growth in 2005 is adjusted to allow for 259TJ forecast to transfer to the contract market.

Graph 3.4 Tariff actual and forecast load



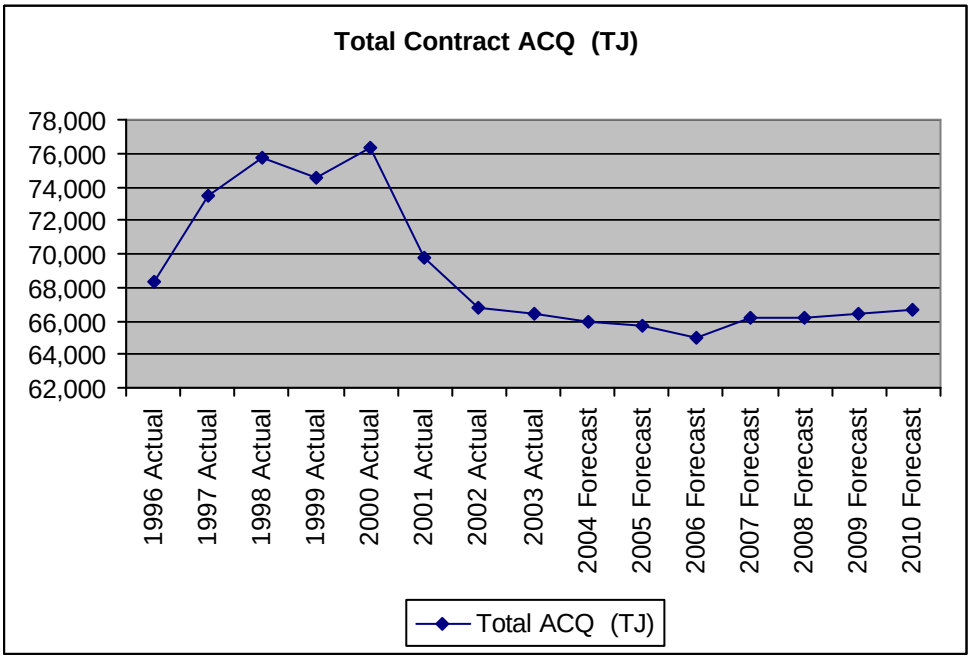
3.3. Contract Market Demand

The Contract Demand as per Final Decision can be summarised as:

Table 3.5 Actual & Forecast Contract Load

Year Ending June	ACQ Growth (TJ)	MDQ Growth (TJ)	Total ACQ (TJ)	Total MDQ (TJ)
1996 Actual			68,326	
1997 Actual	5,112		73,438	
1998 Actual	2,280		75,718	
1999 Actual	-1,159		74,559	
2000 Actual	1,829		76,388	298.4
2001 Actual	-6,658	3	69,730	301.4
2002 Actual	-3,002	0	66,728	301.4
2003 Actual	-365	-4.8	66,363	296.6
2004 Forecast	-449	-1.8	65,914	294.8
2005 Forecast	-258	0.7	65,656	295.5
2006 Forecast	-656	0.6	65,000	296.1
2007 Forecast	1,238	0.7	66,238	296.8
2008 Forecast	-8	0.9	66,230	297.7
2009 Forecast	139	0.7	66,369	298.4
2010 Forecast	239	0.7	66,608	299.1

Graph 3.6 Actual & Forecast Contract Load



Breakdown of Demand Forecasts into Trunk and Local Networks

The Final Decision required AGLGN to disaggregate its demand forecasts into Trunk and Local Network components. In order to allocate costs and therefore determine reference tariffs, it is necessary to segregate the MDQ, ACQ and site number forecasts into Trunk and Local Network components.

The resulting forecasts are as follows:

Table 3.7 Wilton-Newcastle Demand Forecast

	2005/06	2006/07	2007/08	2008/09	2009/10
Contract					
Zone 1: MDQ (Booked) (GJ)	190,594	190,951	191,581	191,950	192,325
Zone 2: MDQ (Booked) (GJ)	185,988	186,342	186,969	187,334	187,706
Zone 3: MDQ (Booked) (GJ)	215,063	215,440	216,087	216,470	216,855
Zone 4: MDQ (Booked) (GJ)	67,469	67,564	67,658	67,752	67,856
Zone 5: MDQ (Booked) (GJ)	65,220	65,262	65,304	65,346	65,397
Zone 6: MDQ (Booked) (GJ)	61,458	61,457	61,456	61,454	61,453
Total Customer Sites	398	398	398	398	398
Tariff					
ACQ (TJ)	28,992	29,900	30,815	31,781	32,798
Customer Sites	881,582	913,135	944,983	977,084	1,009,513

Table 3.8 Wilton-Wollongong Demand Forecast

	2005/06	2006/07	2007/08	2008/09	2009/10
Contract					
Zone 7: MDQ (Booked) (GJ)	3,786	3,749	3,711	3,674	3,637
Customer Numbers	19	19	19	19	19
Tariff					
ACQ (TJ)	2,047	2,106	2,164	2,225	2,279
Customer Numbers	63,052	65,948	68,871	71,818	74,784

Table 3.9 NSW Distribution System – Contract Segment Forecast

	2005/06	2006/07	2007/08	2008/09	2009/10
Coastal					
ACQ (TJ)	59,411	60,582	60,508	60,580	60,754
MDQ (TJ)	271	271	272	272	273
Customer Numbers	417	417	417	417	417
Country					
ACQ (TJ)	5,589	5,656	5,722	5,789	5,855
MDQ (TJ)	25	25	25	26	26
Customer Numbers	55	55	55	55	55
Total					
ACQ (TJ)	65,000	66,238	66,230	66,369	66,608
MDQ (TJ)	296	297	298	298	299
Customer Numbers	472	472	472	472	472

Table 3.10 NSW Distribution System – Tariff Segment Forecast

	2005/06	2006/07	2007/08	2008/09	2009/10
ACQ (TJ)	34,107	35,135	36,202	37,325	38,469
Customer Numbers	998,023	1,034,686	1,071,694	1,109,003	1,146,683

4. CAPITAL COSTS

4.1. Asset Values and Initial Capital Base (ICB)

4.1.1. Opening Capital Base – Valuation Methodology

In the Final Decision 2005, the Tribunal determined the opening capital base for system and non-system assets of $1,967.6 million as at 1 July 2005.

4.1.2. Allocation of 2006 Asset Base to Three Pipeline Groups

The Final Decision 2005 determined that the Rolled Forward Asset Base as at July 2005 be allocated to the following pipeline groups:

Wilton to Newcastle:	$124.2 million nominal
Wilton to Wollongong:	$10.6 million nominal
NSW distribution system:	$1,832.8 million nominal

4.2. Depreciation

4.2.1. Assumptions on Economic Life of Assets for Depreciation

Economic asset lives are used in calculating regulatory depreciation.

Having determined the economic lives of each asset class, annual regulatory depreciation is calculated for each asset class by applying the straight-line depreciation method to the opening regulatory value of each asset class for each financial year.

Consistent with a current cost approach and the use of a real rate of return, depreciation is calculated on the capital base adjusted for inflation.

The following economic lives are used.

Table 4.1 Economic Asset Lives

Asset Class	Economic Asset Life (Years)
System Assets	
Trunk Main	80
Primary Main	80
Secondary Network	80
Medium Pressure Network	50
Secondary Services	50
Medium/Low Pressure Services	50
Alb Valves	50
Trunk Receiving Stations/Packaged Off Take Stations	50
Primary Reduction Stations	50
Primary Valves	50
Secondary Reduction Stations	50
Meters – Contract*	20
Meters - I&C Tariff*	20
Meters - Domestic*	20
Non System Assets	
To be consistent with the categories and lives adopted for financial reporting	

Note:

* Prior to 1 July 2005 all meters were assumed to have an economic life of 15 years.

4.2.2. Depreciation / Accumulated Depreciation

Accumulated regulatory depreciation for the capital base at 30 June 2005* is as follows:

Table 4.2 Regulatory Depreciation as at 30 June 2005
$ million

	Escalated Gross Regulatory Value	Accumulated Depreciation
Transmission Pipeline (Wilton-Newcastle)	174.9	50.7
Transmission Pipeline (Wilton-Wollongong)	16.3	5.7
Distribution Systems:		
County Packaged Off Take Stations (Pots)	5.4	0.1
Contract Meters	11.9	7.1
Tariff Meters	202.3	95.2
Meter Reading Devices	1.2	-0.1
Fixed Plant	31.9	10.1
HP Mains	298.2	71.3
MP Mains	1408.3	439.4
HP Services	4.4	1.7
MP Services	534.3	80.7
Local Network	**2,277.2**	**603.2**
Total Distribution Systems	2,498.0	705.5
Total System Assets	2,689.2	761.9
Non Systems Assets	123.5	83.5
Total Regulatory Asset Base	**2,812.7**	**845.1**

Note: Based on

- Actual capital expenditure and disposals to June 2003 and Forecasts for 2003/04 and 2004/05
- Depreciation for the period to June 2004 as set out in the 2000 Final Decision adjusted for actual inflation over the period
- Forecast depreciation for the year ended June 2005

Forecast depreciation for the period July 2004 to June 2010, is calculated using the methodology set out in Section 4.2.1 is:

Table 4.3 Forecast Depreciation
Nominal $ million

	Wilton/ Newcastle	Wilton/ Wollongong	Distribution Network	Total
2003/04	2.2	0.2	67.1	69.5
2004/05	2.3	0.2	70.0	72.5
2005/06	2.4	0.2	64.8	67.4
2006/07	2.5	0.2	71.0	73.6
2007/08	2.5	0.2	77.3	80.0
2008/09	2.6	0.2	79.8	82.6
2009/10	2.7	0.2	81.7	84.6

4.3. Capital Expenditure

4.3.1. Capital Expenditure – 1999/2000 to 2004/05

Sections 8.16 and 8.17 of the Code set out the criteria for including actual capital expenditure in the roll forward of the capital base and for including forecast capital expenditure in the determination of total revenue and reference tariffs.

A summary of the Final Decision 2005 allowed capital expenditure which has been included in the roll forward of the capital base for the period 1999/2000 to 2004/05 is as follows:

Table 4.4 Capital Expenditure 1999/2000 to 2004/05
Nominal $ million

	1999/ 2000	2000 /01	2001 /02	2002 /03	2003 /04*	2004 /05*	Total
Actual/Forecast							
Market Expansion	55.8	54.7	46.2	48.0	49.9	50.1	304.7
System Reinforcement /Renewal/Replacement	17.1	13.4	5.6	9.5	15.6	31.6	92.8
Non System Assets	5.3	2.2	5.8	2.7	5.2	8.0	29.2
Total	**78.2**	**70.3**	**57.6**	**60.2**	**70.7**	**89.7**	**426.7**

* Based on forecasts for 2003/04 and 2004/05.

This expenditure can be further classified into the following categories:

Table 4.5 AGLGN Allowed Capital Expenditure
Nominal $ million

	1999/00	2000/01	2001/02	2002/03	2003/04*	2004/05*
Capex By Major Pipelines / Asset Category						
Trunk Wilton-Newcastle	0.0	0.0	0.0	0.0	0.7	1.6
Trunk Wilton-Wollongong	0.0	0.0	0.0	0.0	0.0	0.2
Country TRS	0.0	0.0	0.0	0.0	0.9	1.7
Metering	14.6	14.4	13.4	19.9	21.3	23.2
Local Network	63.6	55.9	44.2	40.3	47.8	63.0
Total	**78.2**	**70.3**	**57.6**	**60.2**	**70.7**	**89.7**
Capex Split By Program						
Land/Building/Leasehold	2.1	0.1	0.1	0.0	0.0	
Plant & Equipment	0.9	0.9	0.2	0.1	0.7	1.0
Office Furniture	0.1	0.1	0.0	0.0	0.0	
Motor Vehicles	2.0	1.1	1.2	1.6	1.7	2.0
IT	0.2	0.0	4.3	0.0	1.1	5.1
Access Arrangement	0.0	0.0	0.0	1.0	1.7	0.0
Total Non-System Assets	**5.3**	**2.2**	**5.8**	**2.7**	**5.2**	**8.0**
Mains	21.7	20.7	9.7	7.3	9.8	10.2
Services	23.3	23.4	23.8	23.1	23.1	24.4
Meters	10.8	10.6	12.7	17.7	17.0	15.4
Total Market Expansion	**55.8**	**54.7**	**46.2**	**48.0**	**49.9**	**50.1**
Mains	3.2	0.9	2.5	6.7	7.9	11.2
Services	0.6	0.4	0.0	0.0	0.7	0.0
Programmed Rehabilitation	9.5	8.4	2.4	0.7	0.0	5.1
Meters	3.8	3.7	0.7	2.2	5.4	7.8
Fixed Plant	0.0	0.0	0.0	0.0	1.6	7.5
Total System Upgrade	**17.1**	**13.4**	**5.6**	**9.5**	**15.6**	**31.7**
Total	**78.2**	**70.3**	**57.6**	**60.2**	**70.7**	**89.7**

*Based on forecasts for 2003/04 and 2004/05.

4.3.2. Capital Expenditure – 2005/06 to 2009/10

Sections 8.16 and 8.17 of the Code set out the criteria for including actual capital expenditure in the roll forward of the capital base and for including forecast capital expenditure in the determination of total revenue and reference tariffs.

Consistent with the Code, forecast capital expenditure allowed by the Final Decision 2005 is summarised:

Table 4.6
Real $ million 2005

	2005/06	2006/07	2007/08	2008/09	2009/10
Forecast					
Market Expansion	54.8	53.8	52.7	53.0	53.4
System Reinforcement /Renewal/Replacement	59.9	40.2	37.4	23.2	17.1
Non System Assets	8.0	8.0	8.0	9.2	9.7
Total	**122.7**	**102.0**	**98.1**	**85.4**	**80.2**

This expenditure can be further classified into the following categories:

Table 4.7 AGLGN Actual Capital Expenditure
Real $ million 2005

	2005/06	2006/07	2007/08	2008/09	2009/10
Capex By Major Pipelines / Asset Category					
Trunk Wilton-Newcastle	2.4	0.1	0.8	0.9	0.1
Trunk Wilton-Wollongong	1.0	0.0	0.0	0.0	0.0
Country TRS	0.1	0.3	0.1	0.1	0.1
Metering	23.6	26.6	24.2	26.8	25.9
Local Network	95.6	75.0	73.0	57.6	54.1
Total	**122.7**	**102.0**	**98.1**	**85.4**	**80.2**
Capex Split By Program					
Plant & Equipment	1.0	1.0	1.0	1.0	1.0
Motor Vehicles	2.0	2.0	2.0	2.0	2.0
IT	5.1	5.1	5.1	5.1	5.1
Access Arrangement Costs	0.0	0.0	0.0	1.2	1.7
Total Non-System Assets	**8.0**	**8.0**	**8.0**	**9.2**	**9.7**
Mains	12.7	12.1	10.5	10.7	10.7
Services	25.5	25.2	25.4	25.3	25.5
Meters	16.5	16.5	16.8	17.0	17.2
Total Market Expansion	**54.8**	**53.8**	**52.7**	**53.0**	**53.4**
Mains	39.8	25.2	24.4	10.4	6.0
Services	7.4	3.0	2.9	0.2	0.3
Programmed Rehabilitation					
Meters	7.1	10.1	7.4	9.8	8.7
Fixed Plant	5.6	1.9	2.7	2.9	2.1
Total System Upgrades	**59.9**	**40.2**	**37.4**	**23.2**	**17.1**
Total	**122.7**	**102.0**	**98.1**	**85.4**	**80.2**

4.3.3. Capital Commitments

The nature of AGLGN's capital expenditure program is such that it is not generally required to commit significant amounts of capital expenditure in advance. There are no material capital commitments at the time of the submission of the AAI.

4.4. Rolling Forward The Regulatory Capital Base

Consistent with Section 8.9 of the Code, the roll forward of the capital base can be expressed as follows:

Regulatory capital base = initial capital base + new facilities investments – depreciation – redundant capital + asset revaluation - asset disposals – capital contributions.

As required by the Final Decision 2005 the 1 July 1999 value of the capital base is rolled forward for the purpose of calculating the Total Revenue requirement over the Access Arrangement period from 2005/2006 to 2009/10. The capital base will be indexed over the period 2006-2010 by the CPI inclusive of the Goods and Services Tax (GST).

The following assumptions are used for projecting the capital base.

- Consumer price index (GST inclusive) as set out in Table 4.8
- Actual and forecast capital expenditure
- Actual and forecast capital contributions
- Actual and forecast asset disposals
- Economic asset lives and remaining asset lives as determined in Section 4.2 above

Table 4.8 Annual CPI

Financial Year	CPI % (GST Inclusive)	CPI % (GST Exclusive)
1999 Actual	1.31	1.31
2000 Actual	2.38	2.38
2001 Actual	5.97	2.89
2002 Actual	2.86	2.86
2003 Actual	3.09	3.09
2004 Forecast	2.35	2.35
2005 Forecast	2.80	2.80

4.4.1. Rolling Forward The Regulatory Capital Base 1999/2000 To 2004/05

The combined asset base as at 1 July 1999 is rolled forward to 2004/05 as follows:

Table 4.9 Roll Forward Of Regulatory Capital Base From 1999-2005 – Combined Total Nominal $ million

	1999/00	2000/01	2001/02	2002/03	2003/04 *	2004/05 *
Opening Balance	**1,609.8**	**1,669.0**	**1,772.6**	**1,814.7**	**1,857.1**	**1,899.2**
Add Revaluation Of Assets	39.2	101.5	51.5	56.9	44.4	54.4
Add Capital Expenditure	78.2	70.3	57.6	60.2	70.7	89.7
Less Depreciation	(55.0)	(59.5)	(63.8)	(67.9)	(69.5)	(72.5)
Less Capital Contributions	0.0	(1.4)	(0.5)	(1.4)	(1.2)	(1.1)
Less Disposals	(3.1)	(7.3)	(2.7)	(5.5)	(2.3)	(2.1)
Closing Balance	**1,669.0**	**1,772.6**	**1,814.7**	**1,857.1**	**1,899.2**	**1,967.6**

Table 4.10 Roll Forward Of Capital Base – Wilton To Newcastle Transmission Pipeline From 1999 To 2005 (Nominal $ million)

	1999/00	2000/01	2001/02	2002/03	2003/04*	2004/05*
Opening Balance	**111.7**	**112.5**	**117.2**	**118.5**	**120.1**	**121.4**
Add Revaluation Of Assets	2.7	6.7	3.4	3.7	2.8	3.4
Add Capital Expenditure	0.0	0.0	0.0	0.0	0.7	1.6
Less Depreciation	(1.9)	(2.0)	(2.1)	(2.1)	(2.2)	(2.3)
Less Capital Contributions	0.0	0.0	0.0	0.0	0.0	0.0
Less Disposals	0.0	0.0	0.0	0.0	0.0	0.0
Closing Balance	**112.5**	**117.2**	**118.5**	**120.1**	**121.4**	**124.2**

Table 4.11 Roll Forward Of Capital Base – Wilton To Wollongong Transmission Pipeline From 1999 To 2005 (Nominal $ million)

	1999/00	2000/01	2001/02	2002/03	2003/04*	2004/05*
Opening Balance	**9.6**	**9.6**	**10.0**	**10.1**	**10.3**	**10.3**
Add Revaluation Of Assets	0.2	0.6	0.3	0.3	0.2	0.3
Add Capital Expenditure	0.0	0.0	0.0	0.0	0.0	0.2
Less Depreciation	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)
Less Capital Contributions	0.0	0.0	0.0	0.0	0.0	0.0
Less Disposals	0.0	0.0	0.0	0.0	0.0	0.0
Closing Balance	**9.6**	**10.0**	**10.1**	**10.3**	**10.3**	**10.6**

* Based on forecasts for 2003/04 and 2004/05.

Table 4.12 Roll Forward Of Capital Base – AGLGN Distribution System From 1999 To 2005 (Nominal $ million)

	1999/00	2000/01	2001/02	2002/03	2003/04*	2004/05*
Opening Balance	**1,488.5**	**1,546.9**	**1,645.3**	**1,686.0**	**1,726.7**	**1,767.5**
Add Revaluation Of Assets	36.3	94.2	47.8	52.9	41.4	50.7
Add Capital Expenditure	78.2	70.3	57.6	60.2	70.0	87.9
Less Depreciation	(53.0)	(57.3)	(61.6)	(65.5)	(67.1)	(70.0)
Less Capital Contributions	0.0	(1.4)	(0.5)	(1.4)	(1.2)	(1.1)
Less Disposals	(3.1)	(7.3)	(2.7)	(5.5)	(2.3)	(2.1)
Closing Balance	**1,546.9**	**1,645.3**	**1,686.0**	**1,726.7**	**1,767.5**	**1,832.8**

* Based on forecasts for 2003/04 and 2004/05.

4.4.2. Rolling forward the Regulatory Capital Base 2006 to 2010

The combined asset base as at 1 July 2005 is rolled forward to 2006/10 as follows:

Table 4.13 Roll Forward Of Regulatory Capital Base From 2006 To 2010 – Combined Total Nominal $ million

	2005/06	2006/07	2007/08	2008/09	2009/10
Opening Balance	1,967.6	2,077.7	2,168.1	2,253.4	2,326.9
Redundant Capital	(2.1)	0.0	0.0	0.0	0.0
Add Revaluation Of Assets	56.8	59.6	62.2	64.4	66.4
Add Capital Expenditure	126.1	107.8	106.6	95.4	92.1
Less Depreciation	(67.4)	(73.6)	(80.0)	(82.6)	(84.6)
Less Capital Contributions	(1.1)	(1.2)	(1.2)	(1.2)	(1.3)
Less Disposals	(2.2)	(2.2)	(2.3)	(2.3)	(2.4)
Closing Balance	2,077.7	2,168.1	2,253.4	2,326.9	2,397.1

Table 4.14 Roll Forward Of Capital Base – Wilton To Newcastle Transmission Pipeline From 2006 To 2010 Nominal $ million

	2005/06	2006/07	2007/08	2008/09	2009/10
Opening Balance	124.2	127.7	128.9	130.8	132.8
Add Revaluation Of Assets	3.5	3.6	3.6	3.7	3.7
Add Capital Expenditure	2.4	0.1	0.8	0.9	0.1
Less Depreciation	(2.4)	(2.5)	(2.5)	(2.6)	(2.7)
Less Capital Contributions	0.0	0.0	0.0	0.0	0.0
Less Disposals	0.0	0.0	0.0	0.0	0.0
Closing Balance	127.7	128.9	130.8	132.8	133.9

Table 4.15 Roll Forward Of Capital Base – Wilton To Wollongong Transmission Pipeline From 2006 To 2010 Nominal $ million

	2005/06	2006/07	2007/08	2008/09	2009/10
Opening Balance	10.6	9.6	9.7	9.8	9.9
Redundant Capital	(2.1)	0.0	0.0	0.0	0.0
Add Revaluation Of Assets	0.3	0.3	0.3	0.3	0.3
Add Capital Expenditure	1.0	0.0	0.0	0.0	0.0
Less Depreciation	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)
Less Capital Contributions	0.0	0.0	0.0	0.0	0.0
Less Disposals	0.0	0.0	0.0	0.0	0.0
Closing Balance	9.6	9.7	9.8	9.9	9.9

Table 4.16 Roll Forward Of Capital Base – AGLGN Distribution System From 2006 To 2010 Nominal $ million

	2005/06	2006/07	2007/08	2008/09	2009/10
Opening Balance	1,832.8	1,940.3	2,029.5	2,112.8	2,184.2
Add Revaluation Of Assets	53.0	55.8	58.3	60.4	62.4
Add Capital Expenditure	122.7	107.7	105.8	94.4	92.0
Less Depreciation	(64.8)	(71.0)	(77.3)	(79.8)	(81.7)
Less Capital Contributions	(1.1)	(1.2)	(1.2)	(1.2)	(1.3)
Less Disposals	(2.2)	(2.2)	(2.3)	(2.3)	(2.4)
Closing Balance	1,940.3	2,029.5	2,112.8	2,184.2	2,253.2

4.5. Allocation of Net Working Capital

Net working capital is allocated entirely to the distribution system as follows:

Table 4.17 Working Capital

Financial Year	Nominal $ Million
2006 Forecast	37.7
2007 Forecast	37.1
2008 Forecast	40.0
2009 Forecast	43.9
2010 Forecast	47.4

The underlying assumptions from the final decision are as follows :

- Tariff and contract debtors at 29 days of distribution revenue
- Unbilled gas (accrued revenue) at 41 days of tariff revenue
- Operating cost creditors at 45 days of annual non-capital expenditure
- Capital cost creditors at 27.7 days of annual capital expenditure

4.6. Rate of Return

The Rate of Return is determined using the Capital Asset Pricing Model (CAPM) to determine the Weighted Average Cost of Capital (WACC). AGLGN has used a pre-tax real WACC derived using the forward transformation method and the statutory tax rate.

In its Final Decision , the Tribunal arrived at the rate of return for AGLGN having regard to section 8.30 of the code. The Final Decision concluded that a real pre tax rate of return within the range 5.9-7.3 per cent was appropriate for gas utilities. Within this range, the Final Decision concluded that a real pre tax rate of return of 7.0 per cent was appropriate for AGLGN for this Access Arrangement period.

The parameters used in the determination of WACC are set out in table 4.18.

4.6.1. Parameters Used To Determine WACC

Table 4.18 WACC Range that meets the code requirements

Parameters	Value
Nominal Risk Free Rate (%)	5.7%
Inflation	2.8%
Real risk free rate	2.8%
Market risk premium	5.5%-6.5%
Debt margin	1.13%-1.22%
Debt to total assets	60%
Dividend imputation (gamma)	0.5-0.3
Tax rate	30%
Asset beta	0.3-0.4
Debt beta	0.0
Equity beta	0.8-1.0
Pre-Tax Real WACC (%)	5.9%-7.3%

5. NON CAPITAL COSTS

5.1. Controllable Costs

The Final Decision separated non-capital costs into controllable costs and other costs and then further divided those categories into various sub-categories. 'Controllable' costs are defined as total non-capital costs excluding government levies and unaccounted for gas. These other costs are dealt with separately (see discussion below under 'Other Costs').

The Final Decision considered AGLGN could achieve productivity improvements in line with industry trends and a reduction in costs of 1.5% per annum was applied to Operation, Maintenance, Administration and Overhead costs.

5.2. Other Costs

The Final Decision separated certain non-capital costs from "controllable costs" and specified that mechanisms be put in place to allow variations in these costs to flow-through to reference tariffs. Costs treated in this way were:

- *Unaccounted for gas (UAG)*
- *Government levies*

The mechanism set out for varying reference tariffs for UAG is retained and is set out in AGLGN's Access Arrangement.

The mechanisms for varying government levies have been is retained and is set out AGLGN's Access Arrangement.

5.3. Non Capital Costs 2000-2005

5.3.1. Ancillary Services

Revenue forecast to be received for the provision of Ancillary Services has been treated as a cost recovery and combined with Operating and Maintenance Cost in the determination of total Non-Capital Costs.

5.3.2. Summary Of Non Capital Costs

Table 5.1 Operating Costs
Real $ million 2005

Year Ending June	2005/06	2006/07	2007/08	2008/09	2009/10
Controllable Costs					
Operation & Maintenance	69.1	70.1	70.6	71.1	71.7
Administration & Overheads	18.4	18.7	18.8	19.0	19.1
Marketing	16.6	16.9	17.0	17.2	17.3
Real Controllable Opex	**104.2**	**105.7**	**106.4**	**107.2**	**108.2**
Other Costs					
Government Levies	3.2	3.2	3.2	3.2	3.2
UAG	9.1	8.9	9.0	9.0	9.1
Total Opex	**116.5**	**117.8**	**118.6**	**119.5**	**120.4**

5.4. Allocation Between Labour and Non Labour Costs

Table 5.2 Operating Costs Broken Down By Nature Of Expenditure
Real $ million 2005

	2005/06	2006/07	2007/08	2008/09	2009/10
Labour And Labour Related	0.7	0.7	0.7	0.7	0.7
Materials And Supply	0.0	0.0	0.0	0.0	0.0
Contractors Services	87.0	88.3	88.9	89.8	90.3
Other Costs	16.5	16.7	16.8	16.8	17.1
Government Levies	3.2	3.2	3.2	3.2	3.2
Unaccounted For Gas	9.1	8.9	9.0	9.0	9.1
Allowed Opex	**116.5**	**117.8**	**118.6**	**119.5**	**120.4**

Table 5.3 Operating Costs For Each Pipeline
- Break Down Between Labour And Non-Labour Costs
Real $ million 2005

	2005/06	2006/07	2007/08	2008/09	2009/10
Trunk – Wilton – Newcastle					
Wages And Salaries	0.0	0.0	0.0	0.0	0.0
Other Costs	2.5	2.5	2.5	2.5	2.5
Total	2.5	2.5	2.5	2.5	2.5
Trunk – Wilton – Wollongong					
Wages And Salaries	0.0	0.0	0.0	0.0	0.0
Other Costs	0.4	0.4	0.4	0.4	0.4
Total	0.4	0.4	0.4	0.4	0.4
Local Network					
Wages And Salaries	0.7	0.7	0.7	0.7	0.7
Other Costs	112.9	114.2	115.0	115.9	116.8
Total	113.6	114.9	115.7	116.6	117.5
Total Allowed Opex	**116.5**	**117.8**	**118.6**	**119.5**	**120.4**

5.5. Fixed Versus Variable

Network costs do not vary with throughput. However, network costs increase as new customers are connected and the distribution network expands.

6. TOTAL REVENUE

6.1. Determination of Total Revenue

The Final Decision concluded that the price path approach and the cost of service methodology should be adopted to determine total revenue. The key steps are to establish a revenue stream for AGLGN over the Access Arrangement period and then to allocate revenue between (a) market segments and (b) pipelines. This process involved:

- establishing the cost of services for AGLGN over the Access Arrangement period;
- considering the revenue that should be raised from the Contract segment;
- considering the revenue that should be raised from the Tariff segment;
- comparing cost of services to Total Revenue; and
- considering the implications of the updated indicator analysis to establish the projected financial position of AGLGN.

6.2. Assessment of Cost of Services

Under the cost of service model, the Final Decision required that AGLGN's Total Revenue should cover the following:

- AGLGN's forecast of efficient operating costs, adjusted for efficiency improvement and allowing for growth;
- a rate of return of 7.00% (real, pre-tax) on the capital base;
- depreciation of the regulatory capital base; and
- a nominal return on net working capital.

The following table presents a break down of the total cost of service allowed for AGLGN:

Table 6.1 Break Down Of Total Cost Of Services And Revenue Allowed For AGLGN
Real $ million 2005

	2005/06	2006/07	2007/08	2008/09	2009/10
Return On Capital Base	135.3	138.3	140.2	141.3	141.7
Depreciation	62.5	66.4	70.2	70.5	70.3
Return On Working Capital	3.5	3.3	3.5	3.7	3.9
Operating Costs	116.5	117.8	118.6	119.5	120.4
Scrappings	1.7	1.7	1.7	1.7	1.7
Total	**319.5**	**327.5**	**334.2**	**336.7**	**338.1**

Having determined the total costs of AGLGN's service and revenue requirements, these costs and revenues are then allocated between pipelines and services, and between users.

Section 7 below presents an outline of the cost allocation methodology.

6.3. Revenue Versus Cost of Services

The forecast revenue is compared below with the forecast cost of services:

Table 6.2 Comparison Of Revenue Path And Cost Of Services
Real $ million 2005

	2005/06	2006/07	2007/08	2008/09	2009/10	NPV
Total cost of services	319.5	327.5	334.2	336.7	338.1	1,355.4
Total Revenue	320.6	325.7	331.1	336.7	342.4	1,355.4

6.4. Assessment of Contract Revenue Path

The amount of revenue to be recovered from the Contract segment is designed to recover the following costs:

- operating costs allocated to the Contract segment using the fully distributed cost (FDC) methodology (see Section 7);
- assets serving the Contract segment using the fully distributed cost (FDC) methodology (see Section 7).

Costs allocated to the Contract segment are $39.3m for 2006 in real 2005 dollars.

Table 6.3 Comparison Of Contract Revenue Path And Cost Of Services
Real $ million 2005

	2005/06	2006/07	2007/08	2008/09	2009/10	NPV
Total cost of services	39.3	39.5	39.4	39.0	38.4	160.5
Total Revenue	39.9	39.5	39.1	38.7	38.3	160.5

6.4.1. Final Decision on Contract Revenue

The contract revenue path is set as follows:

Table 6.4 Contract Revenue Paths And Average Contract Price Allowed For AGLGN
Real $ million 2005

	2004/5	2005/06	2006/07	2007/08	2008/09	2009/10
Total Contract Revenue (Real $ million 2005)	47.9	39.9	39.5	39.1	38.7	38.3
Total Contract Demand (PJ)	65.7	65.0	66.2	66.2	66.4	66.6
Real Average Price ($/GJ)	0.73	0.61	0.60	0.59	0.58	0.58
Real Price Change (%)		-15.8%	-2.9%	-1.0%	-1.2%	-1.4%

6.5. Tariff Revenue and Price Path

Prices are determined in real 2005 dollars and indexed by the increase in the CPI and other factors as set out in part 3E of the AA.

For the year 2005, the forecast average Tariff price is $8.58/GJ.

Table 6.5 Comparison Of Tariff Revenue Path And Cost Of Services
Real $ million 2005

	2005/06	2006/07	2007/08	2008/09	2009/10	NPV
Total cost of services	280.2	288.0	294.9	297.8	299.6	1194.9
Total Revenue	280.7	286.3	292.0	298.1	304.1	1194.9

A comparison of price paths is shown in the following table:

Table 6.6 Tariff Revenue Path
Real $ million 2005

	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Total Tariff Revenue	283.4	280.7	286.3	292.0	298.1	304.1
Total Tariff Demand (PJ)	33.0	34.1	35.1	36.2	37.3	38.5
Real Average Price ($/GJ)	8.58	8.23	8.15	8.07	7.99	7.91
Real Price Change (%)		-4.1%	-1.0%	-1.0%	-1.0%	-1.0%

7. COST ALLOCATION TO CONTRACT AND TARIFF SEGMENTS

The cost allocation approach is described below under two headings:

- Operating cost allocation (by asset and customer class)
- Capital cost allocation (by asset and customer class)

7.1. Operating Cost Allocation

Operating costs are first allocated to asset groups. Each asset group's costs are then allocated to customer classes.

Operating cost allocation to pipelines

Activity based costing (ABC) is one approach to implementing a fully distributed cost (FDC) methodology. AGLGN's ABC information for 2002/3 is used to allocate transmission-operating costs to the Wilton-Newcastle and Wilton-Wollongong transmission pipelines. Physical Asset Characteristics are used to allocate costs to the multiple Trunk pricing zones.

Operating cost allocation to customer classes

The allocation of UAG is also considered separately. Although an operating cost, UAG is not an activity, and hence, is not included in AGLGN's ABC analysis. Most UAG costs are associated with the Tariff segment, which predominantly uses low and medium pressure pipes.

UAG is allocated to the Contract and Tariff segments based on a percentage of their estimated throughput volume. Since UAG on the transmission pipelines is insignificant, all UAG is allocated to the distribution system.

On the basis of AGLGN's 2002/3 activity based costing information the Contract segment's share of operating costs (excluding UAG, marketing and contestability costs) is calculated. The Contract segment shares of UAG and marketing costs are then added.

AGLGN's total Contract operating costs for 2005/06 are calculated at $15.5 million as follows:

Table 7.1 Derivation Of Contract Operating Costs For 2005/06

Real 2004/05 $ Million

Contract Segment Operating Costs	$M
Activity Costs	12.4
UAG Allocated To Contract Market	1.4
Marketing Costs	1.8
Total	**15.5**

7.2. Capital Cost Allocation

As with operating costs, capital costs are first allocated to assets, and the capital costs of each asset are then split into the Contract and Tariff segments.

Capital cost allocation to pipelines

The allocation of capital costs to pipelines and assets is based on pipeline and asset information from the Regulatory Asset Register maintained in accordance with the Final Decision 2005.

Capital cost allocation to customer segments

For transmission facilities, capital costs are allocated to the Contract and Tariff segments based on diversified MDQ through the transmission pipelines.

For country Trunk Receiving Station (TRS) facilities, capital costs are allocated to the Contract and Tariff segments based on diversified MDQ through the country region.

The allocation of capital costs for metering assets is based on the regulatory value for those assets attributable to that particular segment. That is, Contract segment metering capital costs are based on the regulatory capital value for Contract meters.

Local Network capital costs are generally allocated to the Contract and Tariff segments based on diversified MDQ's for each Local Network for each segment.

7.3. Summary

The cost allocation approach adopted is:

1. Costs are allocated between *pipelines and asset groups* as follows:
   - capital costs are based on the Regulatory Asset Register as maintained in accordance with the Final Decision 2005; and
   - operating costs are based on an activity based cost allocation.
2. A fully distributed costs methodology is used to allocate both operating and capital costs between Contract and Tariff segments.

The resulting allocation to the contract market segment is:

Table 7.2 Contract Segment Costs Allocation For The Year 2005/06
Real 2004/05 $ Million

	Total Allocation
Operating Costs	
Wilton-Newcastle	1.62
Wilton-Wollongong	0.08
Local Network/Meters	13.77
Total	15.47
Capital Costs	
Wilton-Newcastle	7.05
Wilton-Wollongong	0.15
Local Network/Meters	16.65
Total	23.85
Contract Segment Costs	**39.32**

The overall cost allocation outcomes are:

Table 7.3 2005/06 Regulatory Asset Base
$ million (nominal)

	Total	Contract	Tariff
Trunk: Wilton-Newcastle	**127.7**	**84.6**	**43.1**
Trunk: Wilton-Wollongong	**9.6**	**1.8**	**7.8**
Local Network/Meters	**1940.3**	**185.6**	**1754.7**
- Country POTS	5.4	2.1	3.3
- Meters	133.0	6.1	126.9
- Local Network	1762.0	177.4	1584.6
- Non System Assets	39.9	0.0	39.9
Total	**2077.7**	**272.0**	**1805.7**

Table 7.4 Opex Allocation For 2005/06
Real 2004/05 $ Million

	Total	Contract	Tariff
Trunk: Wilton-Newcastle	2.48	1.62	0.86
Trunk: Wilton-Wollongong	0.44	0.08	0.35
Local Network	103.28	11.11	92.17
Meters	10.32	2.65	7.67
Total	**116.52**	**15.47**	**101.05**

Table 7.5 Capital Cost Allocation For 2005/06
Real 2004/05 $ Million

	Total	Contract	Tariff
Trunk: Wilton-Newcastle	10.65	7.05	3.60
Trunk: Wilton-Wollongong	0.80	0.15	0.65
Local Network	175.15	15.71	159.44
Meters	16.37	0.94	15.43
Total	**202.97**	**23.85**	**179.12**

8. REVENUE ALLOCATION AND PRICING STRUCTURES

8.1. Contract Segment Revenue Allocation and Pricing

8.1.1. Introduction and Summary

This section details the allocation of revenue within the Contract market segment and the derivation of transportation unit charges.

The transportation charges are determined from the Contract revenue allocation for the following assets groups:

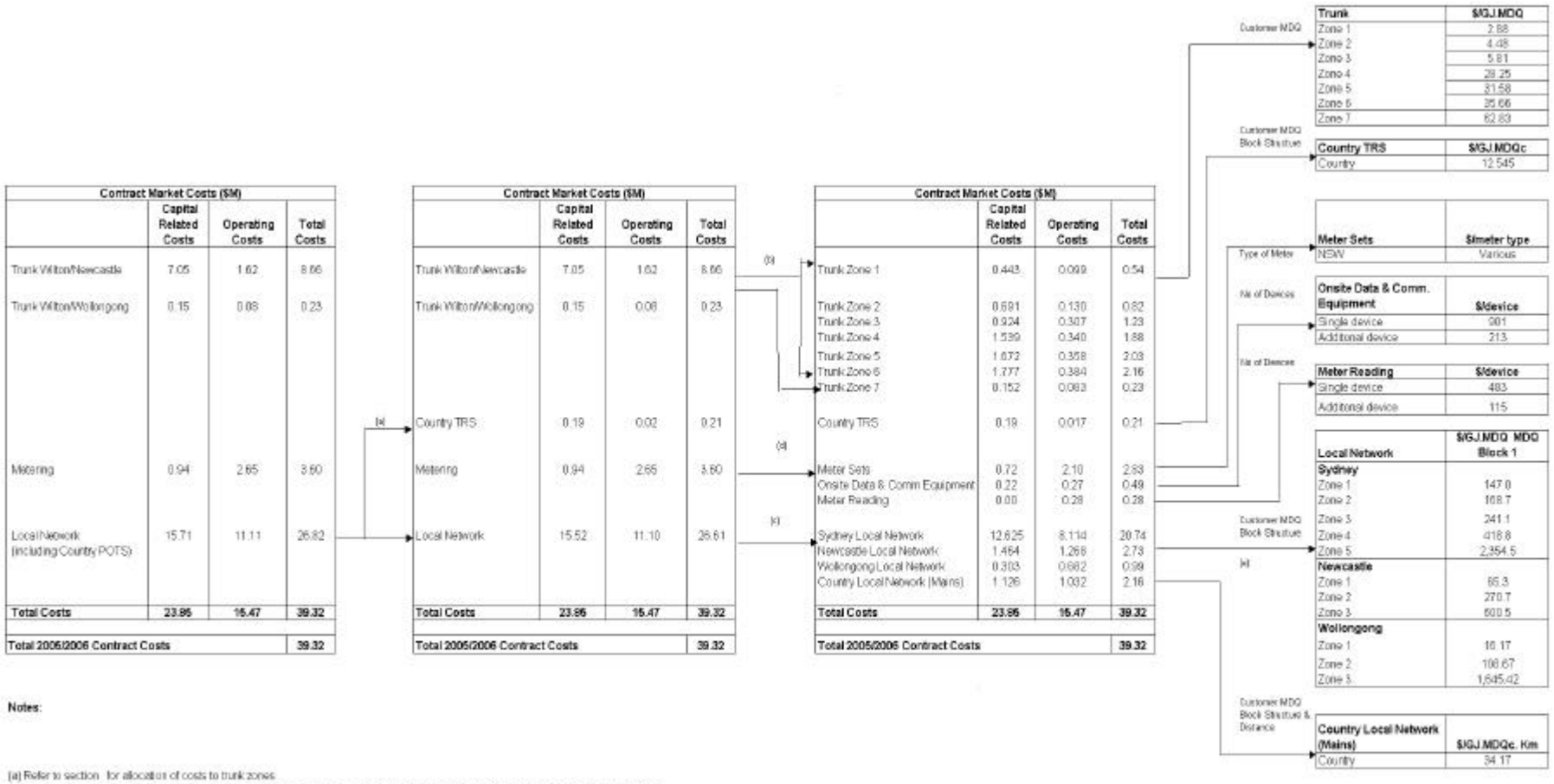
Table 8.1 Contract Market Asset Groups

Asset Group	Description
Wilton- North Trunk (Wilton – Newcastle)	The Trunk main between Wilton and Newcastle which supplies Sydney, the Central Coast and Newcastle.
Wilton-South Trunk (Wilton – Wollongong)	The Trunk main between Wilton and Wollongong which supplies Wollongong
Country Trunk Receiving Stations (TRSs)	Country TRSs or Packaged Offtake Stations (POTS) Country TRSs are part of the total Country Local Network
Meter Set and Meter Reading Assets	Includes meters, meter set installations and on-site data and communication equipment devices in the Sydney, Newcastle, Wollongong and country regions.
Sydney Local Network	Includes primary, secondary and MP/LP mains, valves, TRS/PRS/SRSs and customer services in the Sydney Region.
Newcastle Local Network	Includes Secondary and MP/LP mains, TRS/SRSs, and customer services in the Central Coast and Newcastle regions.
Wollongong Local Network	Includes Primary, Secondary and MP/LP mains, PRS/SRSs and customer services in the Wollongong region.
Country Local Network (Mains)	Includes Secondary and MP/LP mains, SRSs and customer services in regional NSW (excluding Sydney, Newcastle and Wollongong).

The cost allocations for the years 2005/06 to 2009/10 as described in Section 7 is used as the basis for the derivation of Contract transportation unit charges for the Wilton-Newcastle trunk, Wilton-Wollongong trunk, local network and meters.

Table 8.2 summarises the cost allocation to contract segment asset groups for 2005/06

TABLE 9.2: AGLGN CONTRACT MARKET COST ALLOCATION 2005/2006 $2005



Notes:

(a) Refer to section for allocation of costs to trunk zones.
(b) Local network capital related cost allocated to regions by asset relativities of local networks derived from a fully-distributed methodology.
Operating costs were allocated overall (contract/tariff) local network operating cost relativities.
(c) Capital related costs of meter components allocated by their asset values.
Operating costs for meter sets were allocated to meter sets and meter devices and meter reading by deemed activity costs.
(d) Local Network total cost allocated to zones by share of assets relativities between zones.

All charges in this Table are shown exclusive of GST. Consequently, they are slightly different to those in the Access Arrangement.

8.1.2. Derivation of Contract Segment Trunk Charges

The Wilton-Newcastle Trunk is split into six price zones: zones 1 to 4 cover the Sydney region, zones 5 and 6 cover the Central Coast and Newcastle regions. The Wilton-Wollongong Trunk consists of one price zone, that is, price zone 7.

The Contract revenues for Wilton-Newcastle and Wilton-Wollongong Trunk are based on the Regulatory Capital Base as maintained in accordance with the Final Decision 2000 and activity based costing undertaken for 2002/3.

A similar approach is used to allocate the cost of the Wilton-Newcastle Trunk to Zones 1 to 6.

The total Trunk revenue for each zone is allocated using the physical characteristics, eg. number of valves and length and diameter of main for each zone.

The Contract revenue of the Trunk is derived from a fully distributed allocation of the total Trunk revenue between the Contract and Tariff markets. The allocation is based on diversified MDQs of the Contract and Tariff markets forecasted for each year of the access arrangement.

The Contract revenue for the Trunk in each zone is calculated by:

$$\text{Contract Trunk Revenue}_{\text{Zone i}} = \text{Trunk Revenue}_{\text{Zone i}} \times \frac{\sum MDQ_{\text{Con Zone i}}}{MDQ_{\text{T Zone i}}}$$

where:

$MDQ_{\text{Con Zone i}}$ = Diversified peak day MDQ for the contract market flowing through (and withdrawn from) zone i (GJ/d)

$MDQ_{\text{T Zone i}}$ = Total diversified peak day MDQ for the contract and tariff market flowing through (and withdrawn from) zone i. (GJ/d)

The Trunk Unit Charge for each zone is then calculated by dividing the contract trunk revenue from each zone by the forecast MDQ reservations of contract customers utilising that zone.

$$\text{Trunk Unit Charge}_{\text{Zone i}} (\$/\text{GJ MDQ}) = \frac{\text{Contract Trunk Revenue}_{\text{Zone i}}}{\sum MDQ_{\text{R Zone i}}}$$

where:

$MDQ_{\text{R Zone i}}$ = MDQ reservation for contract customers utilising trunk zone i (GJ/day).

Charges are determined on a cumulative basis by summing the charge for each Zone. For example, if the customer's receipt point is in Zone 1 and their gas passes through zone 2 and exits in zone 3, the Trunk Unit Charge would be the sum of Trunk Unit Charges for zones 1, 2 and 3. If the customer's Receipt Point is in Zone 1 and there is no utilisation of any other Trunk Zone, the customer will pay the Trunk Unit Charge for Zone 1 only.

8.1.3. Derivation of Contract Local Network Transportation Charges for Sydney, Newcastle and Wollongong Regions

Local Network Capacity Reservation Transportation Charges for contract customers in Sydney, Newcastle and Wollongong are based on MDQ reservations and the location of their Delivery Point.

The capital related Contract cost for the Local Network is allocated to the regions of Sydney Newcastle and Wollongong in proportion to the Local Network Regulatory Capital Base allocated to the Contract segment using a fully distributed cost methodology. This methodology uses the forecast peak day MDQs to allocate the Regulatory Capital Base to the Contract and Tariff segments.

The Wollongong contract market has a characteristic of high MDQ demand which is supplied using a very small proportion of the network. Hence, the FDC methodology would result in an erroneously high proportion of the capital cost being allocated to the contract market. Therefore a "share of assets" methodology (similar to that described for the contract market postcode allocation) using the engineering flow model of the optimised Wollongong network is used to determine a more cost reflective allocation of the local network between the contract and tariff market.

The operating costs are allocated to the regions based on the activity based costing information. The regional Contract revenues are then used to calculate the Local Network transportation charges.

Each postcode within Sydney is assigned to one of five price Zones. Each postcode within Newcastle and Wollongong is assigned to one of three price Zones. The postcodes are grouped into zones based on an evaluation of the following cost reflecting factors:

i. the relative location of the postcode to the Trunk main;
ii. relative distance of the postcode from the Primary mains;
iii. the utilisation of assets by both Contract and Tariff customers; and
iv. the construction costs of mains in the geographical location.

The assessment ratings for each postcode are shown in Attachment 3.

The share of asset relativities between the price Zones is used to distribute the regional Local Network Contract revenue to the price Zones. The share of assets (by flow) to each postcode is calculated and then aggregated to the zone each postcode is assigned to, as shown below:

$$\text{Revenue Local Network Zone i (\$)} = \text{Revenue}_{\text{Local Network}} \times \frac{\sum SAV_{PC\,Zone\,i}}{CSA_{LN}}$$

where

$SAV_{PC\,Zone\,I}$ = Share of assets to postcodes in zone i ($)
CSA_{LN} = Optimised Contract Stand Alone Replacement Cost of Local Network ($)

AGLGN has applied a FDC allocation of contract market asset value down to regional level (ie Sydney, Newcastle and Wollongong). In allocating capital cost between pricing zones within a region, CSA values on the basis of an existing engineering flow model by postcode have been applied.

To reflect economies of scale of individual customers within a local network zone, customer MDQ capacity reservations are broken into five blocks. Customers pay a base unit charge (for the first block of MDQ reservation) and reduced unit charges for subsequent blocks of MDQ reservations.

Economy of scale factors (fi) reflect the fact that incremental costs of laying mains decreases with increasing pipe capacity (ie while pipe capacity increases by the square of the diameter, the pipe costs do not increase in the same proportion). Hence, larger customers (normally served from larger pipes) should receive declining unit costs with increasing capacity reservation.

The MDQ block structure is shown in Table 8.3.

Table 8.3 MDQ Block Structure

Block	Booked MDQ	Economy Of Scale Factor (f)
1	First 200 GJ	1.0
2	Next 400 GJ	0.6
3	Next 1000 GJ	0.4
4	Next 2000 GJ	0.3
5	All additional GJs	0.2

A Scaled Demand F_T, is therefore calculated for each customer as follows:

$$F_T = f_1 \times MDQ_{Block1} + f_2 \times MDQ_{Block2} + f_3 \times MDQ_{Block3} + f_4 \times MDQ_{Block4} + f_5 \times MDQ_{Block5}$$

where:

f_1, f_2, f_3, f_4, f_5 = economies of scale factors for MDQ blocks 1,2,3,4 and 5.

The base Local Network unit charge (MDQ block 1) for each Zone is then calculated as follows:

$$\text{Base Local Network Unit Charge Zone i (\$/GJ MDQ)} = \frac{\text{Revenue Local Network Zone i}}{\sum F_{T_{Zone\ i}}}$$

where:

$FT_{Zone\ i}$ = Scaled Demand for contract customers in Zone i
i = 1,...,5 (for Sydney), 1,..,3 (for Newcastle), 1,...,3 (for Wollongong)

Subsequent block unit charges for a particular Zone are calculated by multiplying the base Local Network unit charge of that Zone by the appropriate economies of scale factors f_i.

Table 8.4 shows the Local Network revenue allocation to each Zone.

Table 8.4 Contract Revenue Allocation to Local Network Zones

Sydney

	1	2	3	4	5	Total
% Share of Assets	9.0%	18.6%	32.4%	28.2%	11.9%	100.0%
Local Network Revenue Allocation ($ '000)	2,037	4,280	7,446	6,463	812	21,037

Newcastle

	1	2	3	Total
% Share of Assets	25.5%	51.1%	23.4%	100.0%
Local Network Revenue Allocation ($ '000)	753	1,471	547	2,771

Wollongong

	1	2	3	Total
% Share of Assets	10.6%	29.3%	60.1%	100.0%
Local Network Revenue Allocation ($'000)	155	429	416	999

Unit charges are calculated from the revenue allocations and adjusted to account for the capping of the Reference Tariff (refer Section 8.2.5) and for the rolling in of Decrement customers (refer Section 8.2.6).

8.1.4. Derivation of Contract Transportation Charges for Country NSW

Local Network Capacity Reservation charges for country customers comprises a Pressure Reduction Charge relating to the country TRSs (and POTS), and a Local Network mains charge.

Pressure Reduction Charges Relating to Country TRSs

The Contract revenue for the country TRS/POTS is included as part of the Local Network revenue and the country POTS revenue is allocated to the contract and tariff segments based upon the Regulatory Capital Base as maintained in accordance with the Final Decision 2000 and an activity based cost allocation.

Customer MDQ reservations are split into 5 blocks where each block is given a scaled transportation unit cost. The price structure is similar to that described in Section 8.2.3.

The Pressure Reduction Unit Charge ($/GJ MDQ) for Country NSW is calculated as:

$$\text{Pressure Reduction Unit Charge} = \frac{\text{Revenue}_{\text{TRS\_C}}}{\sum_i (f_i \times \text{MDQ}_{i,\text{Block1}} + f_2 \times \text{MDQ}_{i,\text{Block2}} + f_3 \times \text{MDQ}_{i,\text{Block3}} + f_4 \times \text{MDQ}_{i,\text{Block4}} + f_5 \times \text{MDQ}_{i,\text{Block5}})}$$

$\text{Revenue}_{\text{TRS\_C}}$ = Revenue allocation to the country TRSs comprising capital related and Operating Costs components ($).

MDQ_i = The MDQ reservation for contract customer i in the country region (GJ).

f_1, f_2, f_3, f_4, f_5 = economies of scale factors for MDQ blocks 1,.., 5, as shown in Table 8.3.

Local Network (Mains) Charge for Country Customers

Local Network mains charges for contract customers in the Country region are based on their direct distance from the TRS which supplies the mains distribution network and their booked MDQ reservation. The five MDQ blocks applied in the Pressure Reduction Charge also apply to the Local Network Charge.

The Local Network Unit Charge ($/GJ.MDQ/km) is calculated as follows:

$$\text{Local Network Unit Charge} = \frac{\text{Revenue}_{\text{LN\_country}}}{\sum_i (\text{Dist}_i \times (f_1 \times \text{MDQ}_{i,\text{block1}} + f_2 \times \text{MDQ}_{i,\text{block2}} + f_3 \times \text{MDQ}_{i,\text{block3}} + f_4 \times \text{MDQ}_{i,\text{block4}} + f_5 \times \text{MDQ}_{i,\text{block5}}))}$$

where

$\text{Revenue}_{\text{LN\_country}}$ = Revenue allocated to the Local Network of the Country Region comprising capital related and Operating Costs components ($)

Dist_i = Direct distance (km) from the TRS supplying the local network, rounded to the nearest 0.5 km

f_1, f_2, f_3, f_4, f_5 = economies of scale factors for MDQ blocks 1,…,5 as shown in Table 8.3

8.1.5. Capping of the Reference Tariff

Capped customers are customers whose prices would otherwise exceed the capped rates in Table 8.5. The shortfall between the expected revenue from these customers and the revenue that would be achieved if they were to pay the Reference Tariff that would have resulted without rolling in is borne by the remaining customers.

Capping is applied each year. For customers capped according to Table 8.5 below, the equivalent MDQ charge is calculated by multiplying the blocked capped rates by the annual load and dividing by booked MDQ. Adjustment is made for the metering charge as the capped rate is inclusive of the metering charge.

Table 8.5 Capped Rates, Pre-GST

Blocks	$/GJ Equivalent Real 2004/2005 dollars
First 20 TJ p.a.	3.67
Next 30 TJ p.a.	2.99
All Additional	2.53

8.1.6. Roll in of Decrement and Capped Customers

The final calculation of Reference Tariffs involves reallocating revenue not recovered from Decrement and Capped customers. Decrement customers are customers whose transportation charge (not including metering components) is discounted as provided under Section 8.43 of the Code and approved by the Tribunal.

Decrement and capped customers first cover their Meter and related charges, then their Trunk Charge and part of their Local Network charge. The shortfalls are calculated on a regional basis so that, for example, a shortfall in the Sydney Local Network will not affect Newcastle's Local Network price.

8.1.7. Derivation of Contract Throughput Charges

Contract revenue is allocated to Users on the assumption that all users will choose the Capacity Reservation Service, because this represents the most cost-effective service where a user manages their MDQ. The Throughput Service is included for users that have uncertain or variable circumstances and would prefer the predictability of throughput based charging and the MDQ management service implied by it.

It is assumed that revenues attracted for the small proportion of the market that would choose this service will offset the revenues that would have been earned under one of the capacity based services. Any potential for earning higher than expected revenue under this service is fully offset by the degree of risk associated with this service to AGLGN when compared with the Capacity Reservation Service.

The price for the Throughput Service is derived assuming a 20% load factor and by applying a 20% premium to the charge for MDQ that would apply under a capacity reservation service.

8.1.8. Derivation of Contract Metering Charges

There are three metering related charges; that is, a Provision of Basic Metering Equipment Charge which is part of the Transportation Service, and On-site Data And Communications Equipment Charge and a Meter Reading Charge which are part of a separate Meter Data Service.

The Contract revenue allocation to contract market meters is derived from the capital related and operating costs of these components.

Provision of Basic Metering Equipment Charge

$$\text{Provision of Basic Meter Equipment Charge for meter type j (\$/meter type)} = \text{Revenue}_{\text{Meter}} \times \frac{\text{Meter Type}_{jH}}{\sum_i (n_i \times \text{Meter Type}_{iH})}$$

where

$\text{Revenue}_{\text{Meter}}$ = Revenue allocation to the Meter Sets comprising capital related and Operating Costs components ($).

Meter Type_{jH} = Provision of Basic Metering Equipment Charge of Type j (or equivalent type based on size and function for new types) under Final Decision 2000.

Meter Type $_{iH}$	=	Provision of Basic Metering Equipment Charge for each Type (or equivalent type based on size and function for new types) under Final Decision 2000
n_j	=	number of meters of type j
n_i	=	number of meters of type I (for summation of all types)

On-site Data and Communication Equipment Charge

The On-Site Data and Communication Device Charge is calculated by dividing the revenue allocated to these devices by the number of data and communication devices installed in the Contract segment, allowing for a second device at the same Delivery Station to be charged at an incremental cost.

$$\text{On-site Data and Comm. Equip. Charge for a single device } (\$) = \frac{\text{Revenue}_{devices}}{n_S + c\, n_D}$$

where

$Revenue_{devices}$	=	Revenue allocation to the data and communication devices comprising capital related and Operating Costs components ($).
n_s	=	number of customers with single devices
n_D	=	number of customers with two devices at the same Delivery Station.
c	=	incremental factor for customers with two devices
	=	1.237

Meter Reading Charge

The Contract Meter Reading Charge is calculated by dividing the revenue allocated to meter reading by the number of data and communication devices installed in the Contract segment, allowing for a second device at the same Delivery Station to be charged at an incremental cost.

$$\text{Meter Reading Charge for a single device } (\$) = \frac{\text{Revenue}_{\text{Meter Reading}}}{n_S + c\, n_D}$$

where

$Revenue_{Meter\ reading}$	=	Revenue allocation to the Meter Reading comprising operating cost ($)
n_s	=	number of customers with single devices
n_D	=	number of customers with two devices at the same Delivery Station
c	=	incremental factor for customers with two devices
		1.237

The Meter Reading Charge for customers with two devices at the same Delivery Station is calculated by multiplying the Meter Reading unit charge for a single device by the incremental factor c. The Meter Reading Charge for the second device is expressed as an incremental cost to the Meter Reading Charge of a single device.

Gas Swap Transaction Charge

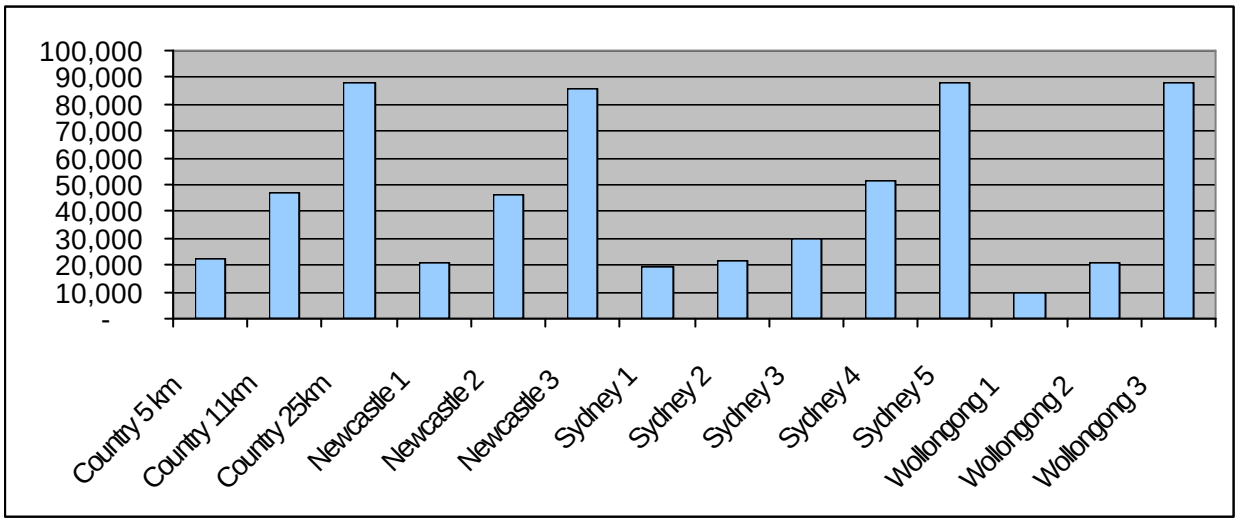
Charges for the Gas Swap service are the estimated incremental operating costs to provide the service. The incremental operating costs have not been included in the development of other tariffs.

8.1.9. Regional Contract Pricing Outcomes

As a consequence of the cost reflective cost allocation methodology outlined in sections 8.2 and 8.3, the Distribution Tariff payable for Non-Tariff delivery points is dependant of the location of those delivery points.

As an indication of the variation between regions and between pricing zones within regions, table 8.6 shows the total distribution charge payable by a typical mid-size Non-Tariff Delivery point situated in a variety of local network zones.

Table 8.6 Regional Non-Tariff Pricing outcome



Assumptions: County charges based on sites situated 5km, 11km and 25Km respectively from the relevant POTS or TRS
Annual Contract Quantity of 25TJ
Load Factor 57%
Assumes capping applies as set out in section 8.1.6

8.2. Tariff Segment Revenue Allocation and Pricing

8.2.1. Introduction

Tariff prices have the following components:

- A Tariff Service Charge for use of the Trunk (a flat $/GJ) applicable to customers in Sydney, Newcastle and Wollongong regions only.

- Charges for the Local Network Tariff Service consisting of:
  - A Tariff Charge block structure
  - A Provision of Basic Metering Equipment Charge
  - A fixed charge

- Charges for the Meter Data Services:
  - A Meter Reading Charge

The structure of prices is retained from the Final Decision 2000 which provides a price for customers which is related to their usage level and does not require a knowledge of either the customer's appliances or their usage profile.

Specific issues in the gas market are taken into consideration in developing the block structure. These are:

1. Maintenance of competitiveness with substitute fuels;
2. Minimising price movements of individual market segments; and
3. Maintaining appropriate relativities between Tariff and Contract prices.

The source of data on which the calculation of the tariffs is based is the 2002/03 billing information. This supplies the number of customers in various segments (ie monthly or quarterly meter reading and number below 6m^3/hr) as well as the percentage load in each block and the load above 6m^3/hr. These values are then increased to account for the forecast increase in customer numbers and demand so that in each year the relativities between the various segments and blocks are maintained.

8.2.2. Derivation of Local Network Tariff Charges

Local Network Tariff Charges are derived using an iterative process. This involves reviewing the Local Network block structure to maintain competitiveness with substitute fuels. This approach will minimise price movements to individual market segments, achieve appropriate relativity between Tariff and Contract prices, while at the same time achieve an appropriate and equitable revenue allocation to the Local Network for the Tariff segment.

The Local Network Tariff Charges derived for 2004/05 are then increased or decreased by the same proportion to achieve the approved revenue in subsequent years using forecast volumes.

8.2.3. Derivation of Tariff Trunk Charges

Tariff customers utilising the Trunk system pay a single Trunk charge. This charge applies to their throughput. The Trunk Unit Charge for the Tariff segment is calculated by dividing the allocated Trunk revenues for each year by the throughput of the Tariff market served by the trunks for that year.

8.2.4. Derivation of Tariff Charges for Metering

The total revenue for Tariff metering is allocated to the meter sets and meter reading by the capital related and operating costs of these components.

Provision of Basic Metering Equipment Charge

The revenue for meter sets is further allocated to two groups of meters - below $6m^3$/hr capacity and above $6m^3$/hr on the capital related and operating costs associated with each group of meters. A charge for meters below $6m^3$/hr is then determined by dividing the revenue allocation to these meters by the number of installed meters in this class. A charge for meters above $6m^3$/hr capacity is determined by dividing the revenue allocation to this group by annual throughput of these meters.

Meter Reading Charge

A charge for monthly and quarterly reads is determined by allocating the meter reading revenue in accordance with relative cost and numbers of monthly and quarterly reads of the Tariff customers.

9. SYSTEM CAPACITY AND VOLUME ASSUMPTIONS

9.1. System Description

9.1.1. Introduction

This section provides details of the AGLGN gas distribution system in NSW and the volume growth assumptions applicable to the Access Arrangement period.

9.1.2. Description of AGLGN Gas Distribution Systems

AGLGN operates approximately 23,000 kilometres of gas distribution systems in NSW with over 900,000 customer connections to these systems. The systems provide access to natural gas in Sydney, Newcastle, Wollongong and regional country centres throughout NSW.

AGLGN has networks in 75 Local Government Areas throughout NSW. The extent of these networks is portrayed on a series of maps (Attachment 1).

Natural gas is delivered to AGLGN's systems through the Moomba-Sydney Pipeline and its laterals (owned by the Australian Pipeline Trust (APT), from the Alinta owned Eastern Gas Pipeline (EGP), and from coal seam methane supplied by the Sydney Gas Company.

The network systems in Sydney, Newcastle and Wollongong are supplied by the AGLGN Trunk Mains which interconnect with the Moomba-Sydney Pipeline at Wilton, and also through the EGP at Horsley Park, and Port Kemala.

The main elements of the network system within NSW are described below.

9.1.3. Trunk Main

A Trunk main supplies AGLGN's gas distribution systems in Sydney, Newcastle and Wollongong. The Sydney to Newcastle trunk main has two receipt points or Custody Transfer Stations (CTS), located at Wilton (south of Sydney), and Horsley Park (in western Sydney). The Wilton CTS is supplied by the Moomba-Sydney Pipeline, whilst Horsley Park is supplied from the EGP. The minimum contracted gas pressure for AGLGN at Wilton is 3800 kPa. The minimum network operating pressure requirement at the Horsley Park Receipt Point is 3500 kPa. The trunk main to Wollongong is supplied from the Wilton CTS.

9.1.4. High Pressure Systems

There are two independent primary systems in the Sydney region, the Sydney Metropolitan Primary mains and the Western Sydney Primary mains. The Sydney Metropolitan Primary main is fed from a Trunk Receiving Station (TRS) on the trunk main at Horsley Park, while the Western Sydney Primary main is supplied from a TRS at Eastern Creek. The Maximum Allowable Operating Pressure (MAOP) of both primary networks is 3400 kPa, with a minimum allowable operating pressure of 1750 kPa.

The Wollongong Primary main is supplied from the Wilton to Wollongong trunk main via a TRS at Mount Keira. There is a receipt point from the EGP, at the Port Kembla CTS,

which also feeds the Wollongong Primary main. The minimum network operating pressure requirement for this receipt point is 2600 kPa.

The Secondary networks supply gas to the medium and low-pressure distribution systems, as well as directly to many Contract and Tariff customers. The MAOP of the Secondary networks is 1050 kPa, with a minimum allowable pressure of 525 kPa.

The Sydney Metropolitan Primary main supplies gas to the Sydney secondary networks via a series of Primary Regulating Stations (PRSs). The Western Sydney Primary main feeds a PRS that supplies the Sydney West and Blue Mountains secondary networks. The Wollongong Secondary network is supplied from the Primary network via a PRS. As there is no primary network in Newcastle, the Newcastle Secondary networks are supplied directly from the Trunk main via TRSs.

The Secondary networks (or in some cases, the medium pressure networks) in country NSW are supplied directly from Moomba to Wilton transmission pipeline via local TRSs.

9.1.5. Medium and Low Pressure Distribution Systems

The medium and low-pressure (MP and LP) distribution networks are fed from the Secondary networks via SRSs (Secondary Regulator Sets). LP networks have an MAOP of less than or equal to 7kPa. MP networks have an MAOP ranging from greater than 7kPa to 400 kPa.

Nearly all Tariff customers are supplied from the MP and LP networks.

9.1.6. Meters and Services

Each Contract and Tariff customer is supplied by a service and meter set.

All but a small number of small Contract customer sites are provided with on-site daily data recording and communication equipment.

9.2. Data

9.2.1. Network Assets

The distribution assets comprising the NSW network as at June 30, 2003 are given in the tables below.

Table 9.1 Network Assets By Regions
Length (Km) / Number

	Sydney	Newcastle And Central Coast	Wollongong	Country	Total
Trunk Mains	78	161	33[1]	0	272
Primary Mains	109	0	7	0	116
Secondary Mains	913	241	69	186	1,409
MP And LP Mains	14,805	2,419	1,211	2,876	21,311
Secondary Services	1,564	79	107	75	1,825
MP And LP Services	626,849	89,483	49,701	66,307	832,340
Trunk ALB Valves	10	3	2	0	15
Primary ALB Valves	13	0	0	0	13
TRSS	11	4	8	27	50
PRSS	10	0	1	1	12
SRSS	387	53	73	68	581
Contract Meters	422	71	42	64	599
I&C Tariff Meters	15,787	1,904	819	1,609	20,119
Residential Meters	743,705	91,574	51,781	65,500	952,560

Note:
[1]Wollongong trunk main from Wilton – Gipson Road, Figtree

9.2.2. System Load Profiles

Gas issues in TJ for the period July 2002 – June 2003 are detailed in the table below:

Table 9.2 Gas Issues 2002-2003
TJ

	Sydney	Newcastle	Wollongong	Country	Total
Jul-02	6,702	2,072	807	1,123	10,704
Aug-02	6,169	1,747	739	1,022	9,677
Sep-02	5,259	1,853	714	803	8,629
Oct-02	4,894	1,852	665	652	8,062
Nov-02	4,600	1,726	659	509	7,494
Dec-02	4,276	1,699	651	459	7,085
Jan-03	4,192	1,717	655	445	7,009
Feb-03	4,166	1,540	616	471	6,793
Mar-03	4,846	1,771	661	558	7,835
Apr-03	4,762	1,611	647	594	7,613
May-03	5,700	1,868	707	827	9,102
Jun-03	5,827	1,611	736	969	9,143
Total	61,393	21,066	8,256	8,431	99,146

The average and peak flow rates for the Contract and Tariff segments over the above mentioned period are:

Table 9.3 Average And Peak Flow Rates

	Sydney	Newcastle	Wollongong	Country
Average Daily Flow Rates (TJ)	168.2	57.7	22.6	23.1
Peak Day Flow Rates (TJ)	240.1	74.9	27.6	47.3

9.2.3. Customer Information

Actual 2003 customer numbers and annual loads for the Sydney, Newcastle, Wollongong and Country regions are given in the tables below. The Contract customer numbers include all customers with annual usage greater than 10TJ PA.

Table 9.4 30 June, 2003 Customer Sites By Region

	Contract	Tariff
Sydney	335	692,748
Newcastle	56	86,759
Wollongong	19	48,507
Country	55	64,440
Total	465	892,454

Table 9.5 2002-2003 Annual Usage By Region
TJ

	Contract	Tariff
Sydney	36,129	23,378
Newcastle	18,295	2,770
Wollongong	6,928	1,221
Country	5,012	3,395
Total	66,364	30,764

9.3. Description of System Capabilities

9.3.1. General

A series of Trunk Receiving Stations (TRSs) and Packaged Off Take Stations (POTS) owned by AGLGN (refer to Attachment 2), supply the various local High-Pressure (HP) distribution networks off the Moomba-Sydney Pipeline. The Medium Pressure (MP) and Low Pressure (LP) parts of the Network are served via district regulators from the HP system or in some cases, directly from the POTS.

Those sections of the Network which are in Sydney, Newcastle and Wollongong are supplied by the AGLGN Trunk Main which interconnects with the Moomba-Sydney Pipeline at Wilton, and with the Eastern Gas Pipeline at Horsley Park and Port Kembla.

Those sections of the Network which are in country NSW are supplied directly or by laterals from the Moomba-Sydney Pipeline owned by the Australian Pipeline Trust (APT).

9.3.2. Extent of AGLGN Networks

This Access Arrangement Information applies to AGLGN networks situated in the Local Government Areas (LGAs) listed in the tables in Attachment 3. This Access Arrangement covers the LGAs listed and also other LGAs in which AGLGN may develop the network in the future.

10. KEY PERFORMANCE INDICATORS

Separate KPIs are relevant for the Transmission and Distribution segments of the AGLGN distribution networks. These are calculated as set out below:

Table 10.1 Transmission Pipeline KPIs
Operating cost per kilometre – real 2005 $

	2005/06	2006/07	2007/08	2008/09	2009/10
Wilton - Newcastle Trunk	10,473	10,473	10,473	10,473	10,473
Wilton – Wollongong Trunk	12,195	12,195	12,195	12,195	12,195

Table 10.2 Distribution System KPIs
Operating cost per metre and cost per customer site – real 2005 $

	2005/6	2006/7	2007/8	2008/09	2009/10
Operating Cost /Metre	3.56	3.58	3.58	3.58	3.59
Operating Cost /Customer Site	114	111	108	105	102

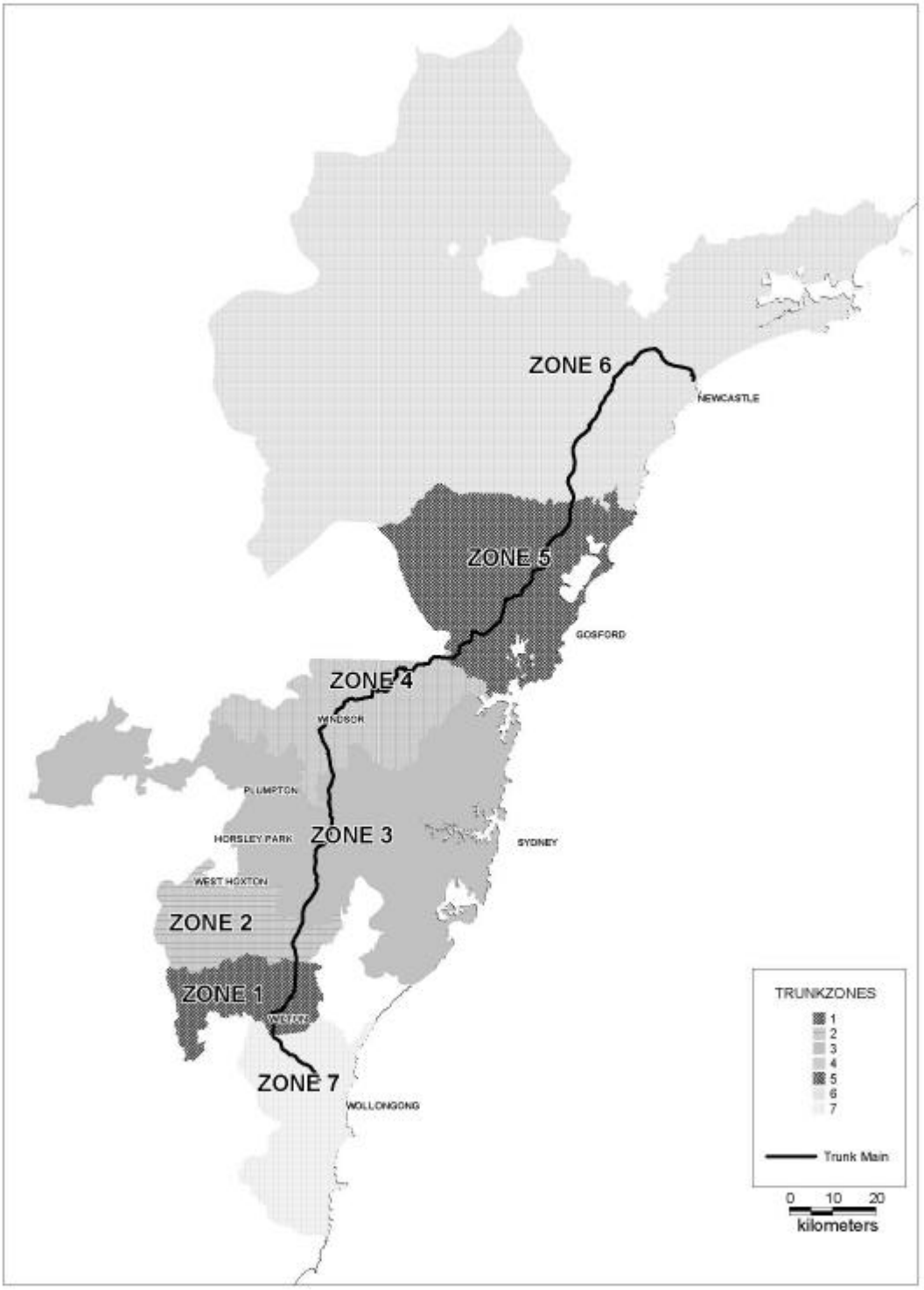
Operating cost per km and per metre are calculated by dividing the "Operating & Maintenance" and "Administrative and Overhead" costs for each pipeline cost by the relevant length of main.

Operating cost per customer site for the Distribution System is based on the total operating cost allocated to the Distributed System.

ATTACHMENTS

ATTACHMENT 1

MAPS OF THE SYSTEM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ZONE 5
GOSFORD
ZONE 4
WINDSOR
PLUMPTON
HORSLEY PARK
ZONE 3
SYDNEY
WEST HOXTON
ZONE 2
ZONE 1
WICTON
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WOLLONGONG
TRUNKZONES
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2
3
4
5
6
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Trunk Main
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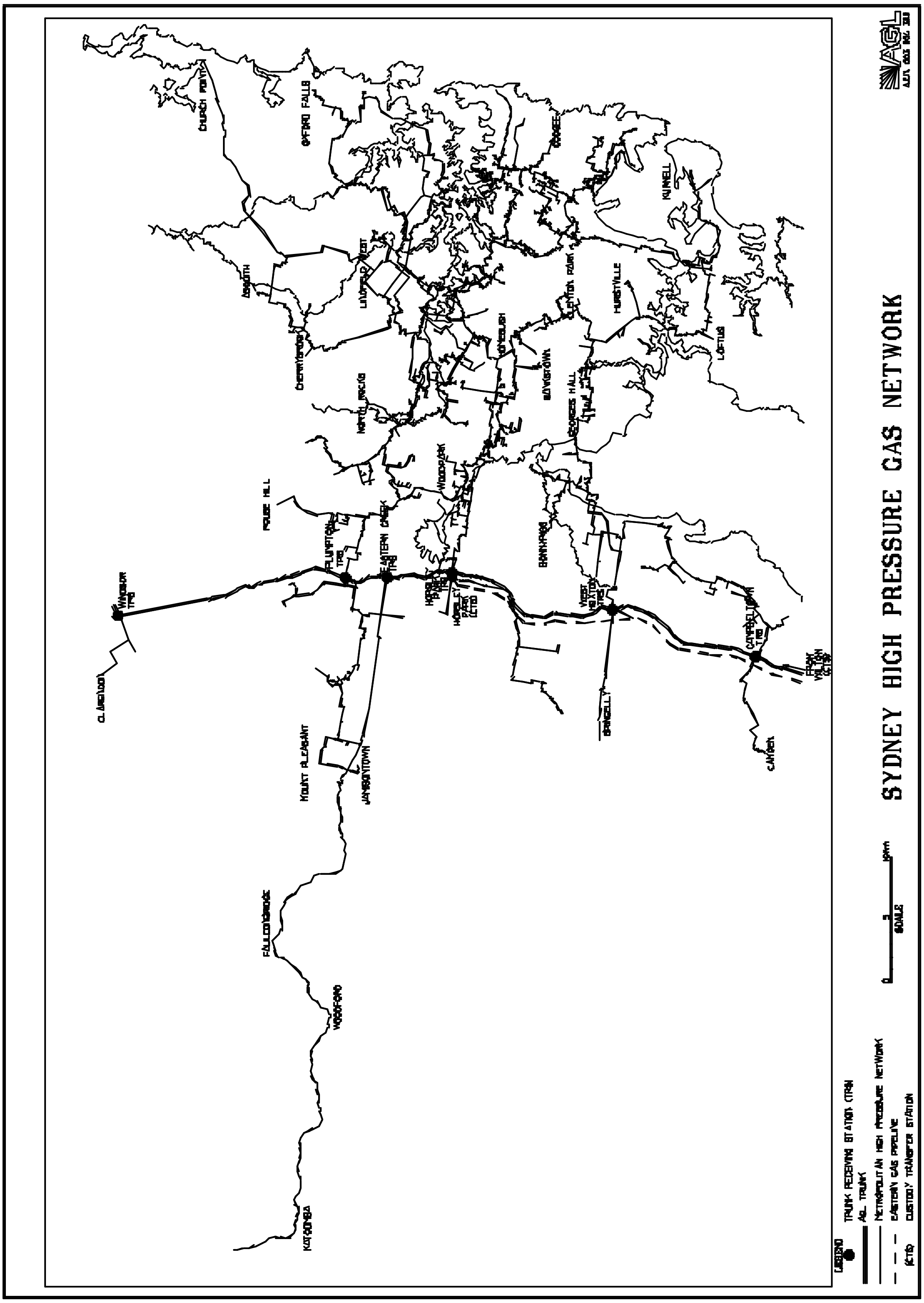
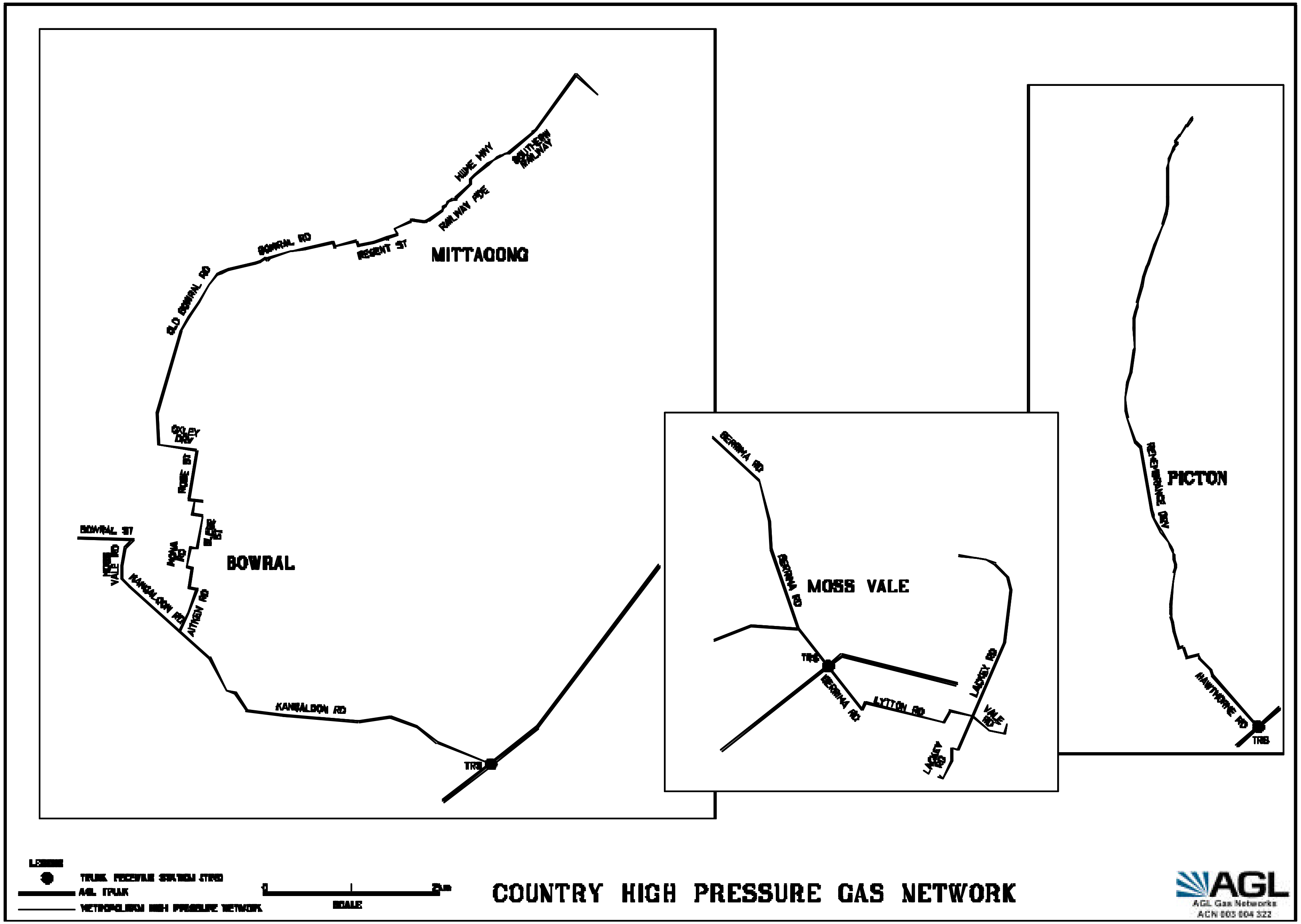
kilometers


SYDNEY HIGH PRESSURE GAS NETWORK
LEGEND
TRUNK RECEIVING STATION (TRS)
AGL TRUNK
METROPOLITAN HIGH PRESSURE NETWORK
EASTERN GAS PIPELINE
(CTS) CUSTODY TRANSFER STATION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AITKEN RD
TRS
MOSS VALE
BERRIMA RD
LYTTON RD
LACKEY RD
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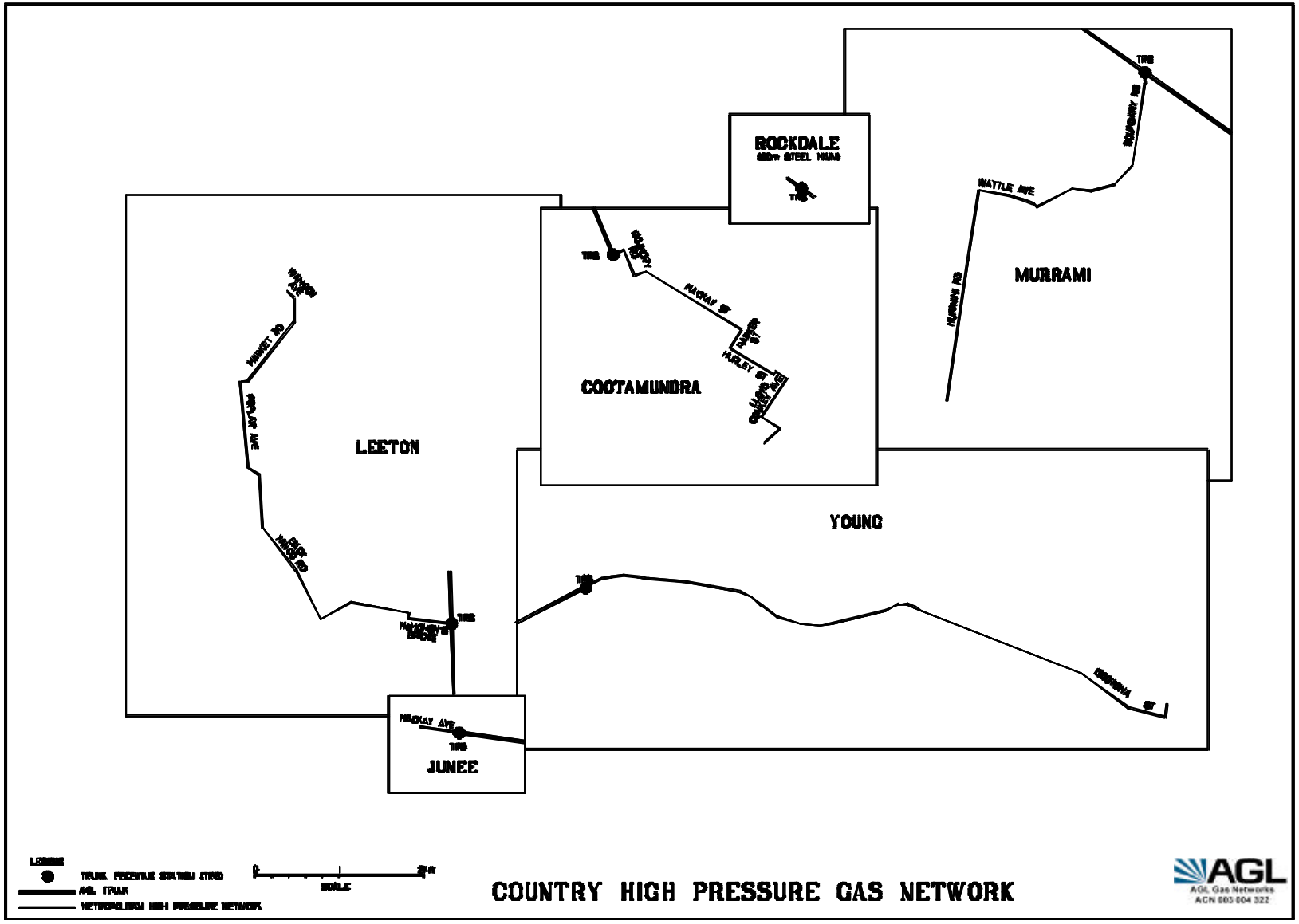
AGL
AGL Gas Networks
ACN 003 004 322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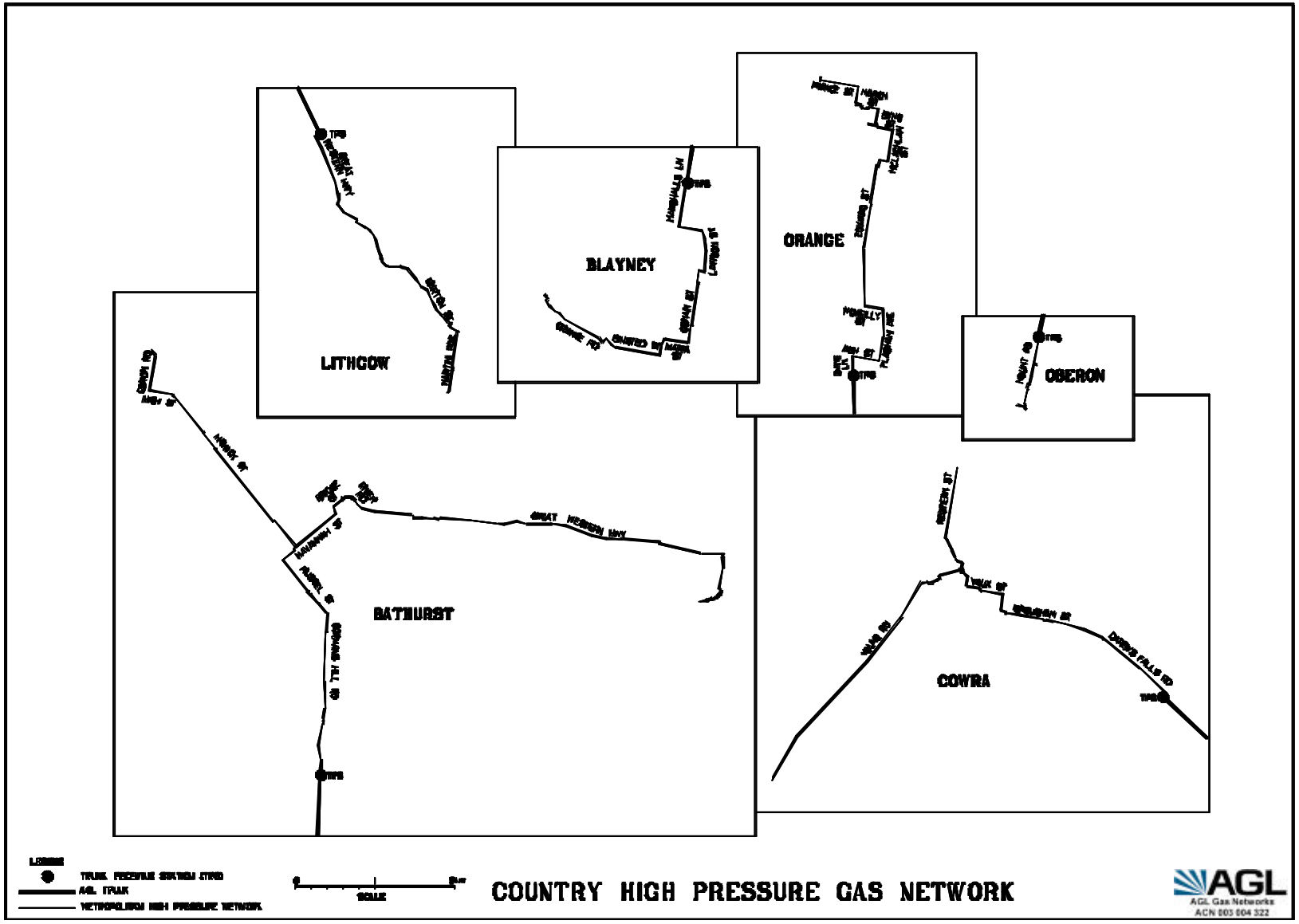
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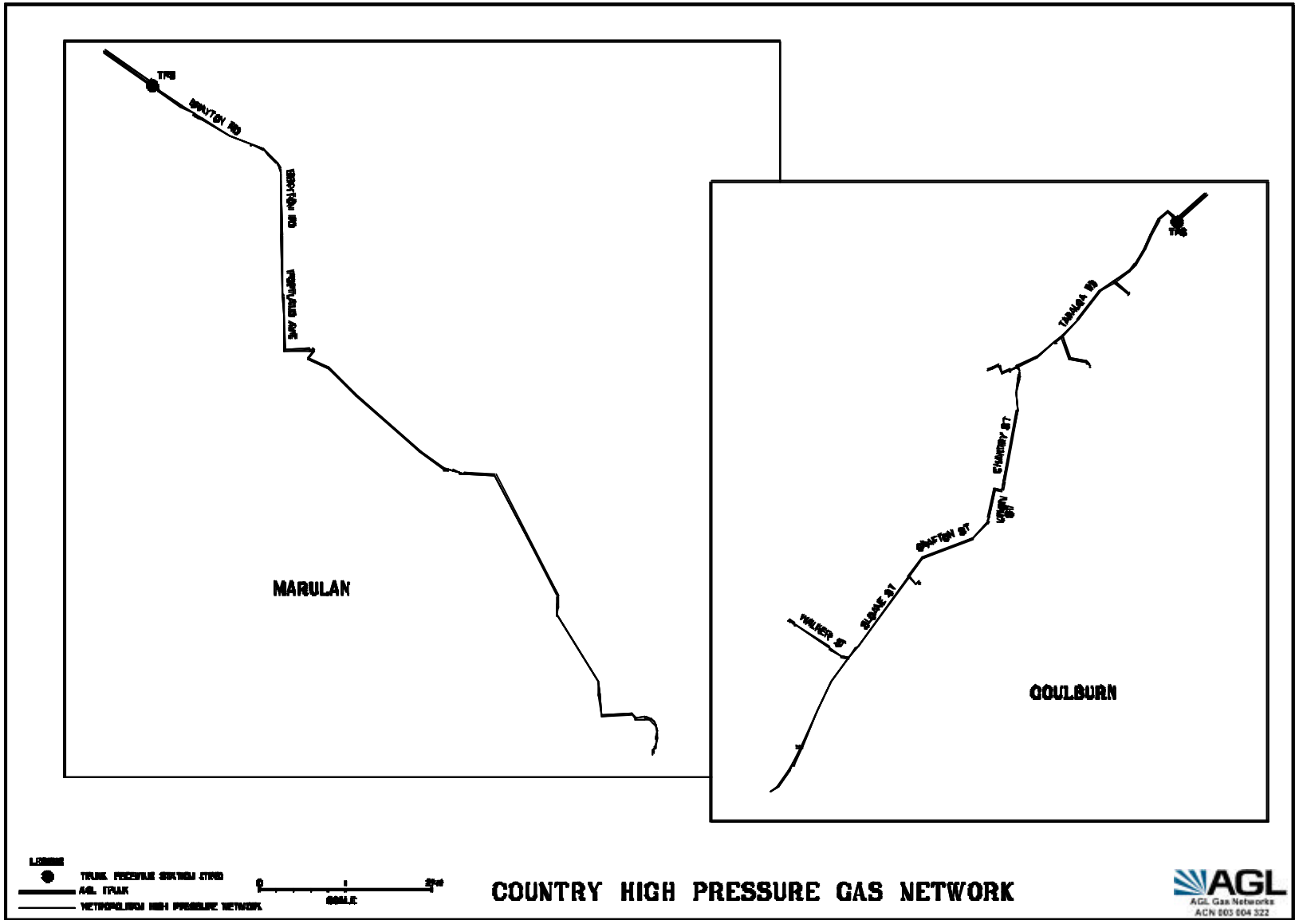
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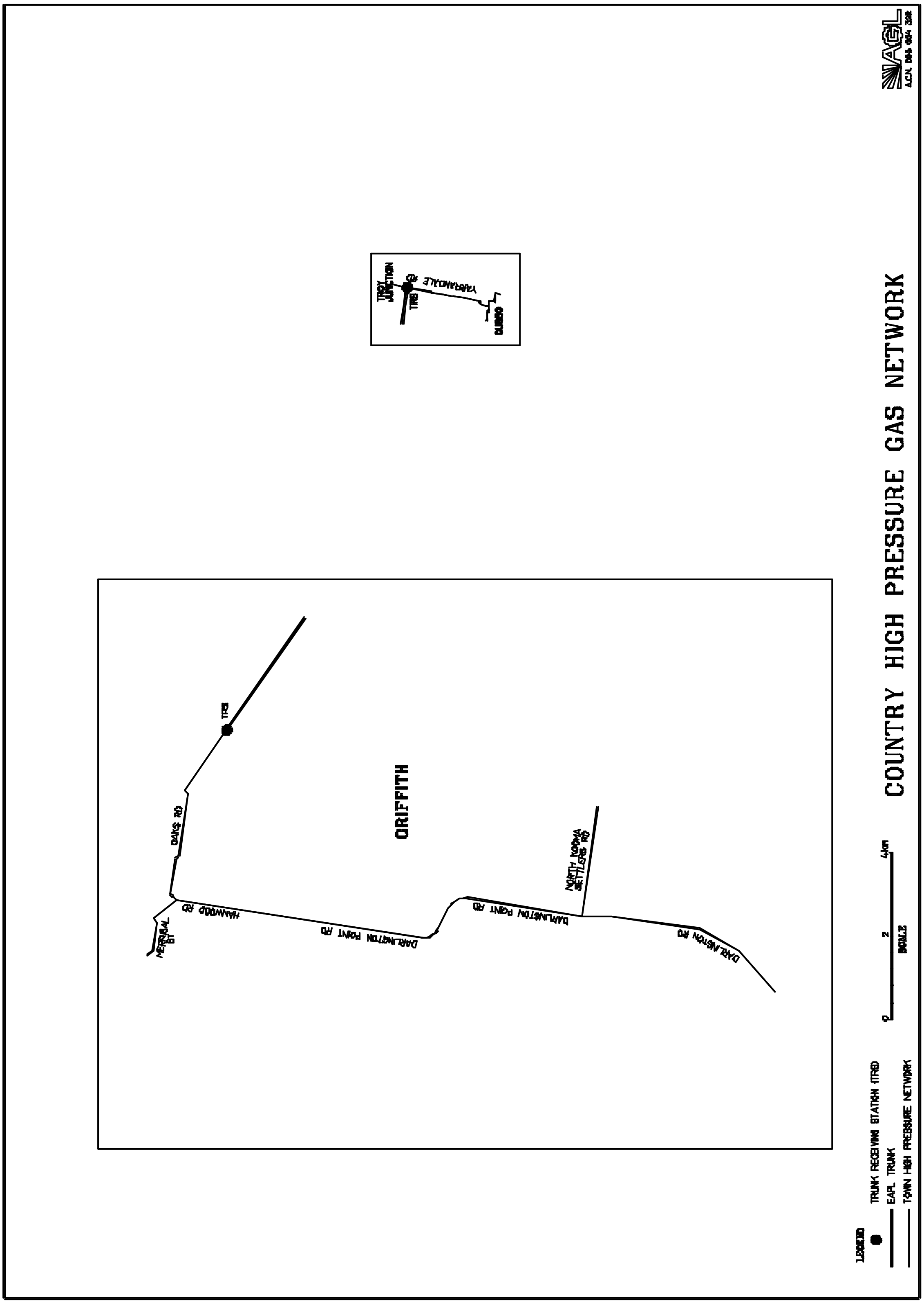
COUNTRY HIGH PRESSURE GAS NETWORK
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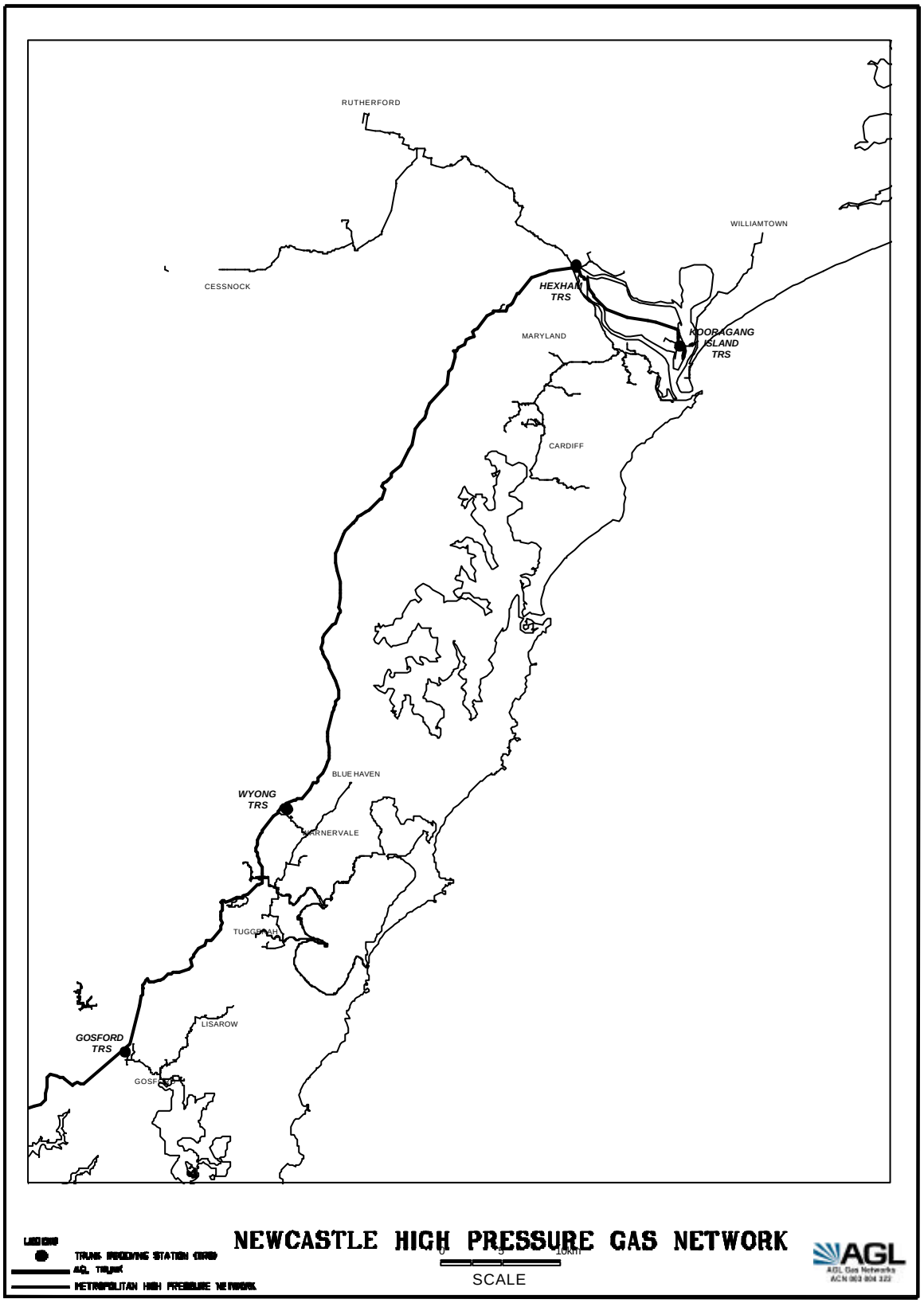
TRS
OAKS RD
HANWOOD RD
DARLINGTON POINT RD
NORTH YOORMA SETTLERS RD
TROY JUNCTION
YARRANDALE RD
DUBBO
LEGEND
TRUNK RECEIVING STATION (TRS)
EAPL TRUNK
TOWN HIGH PRESSURE NETWORK
SCALE
0
2
4km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TUGGERAH
LISAROW
GOSFORD TRS
GOSFORD
LEGEND
TRUNK REGULATING STATION (TRS)
AGL TRUNK
METROPOLITAN HIGH PRESSURE NETWORK
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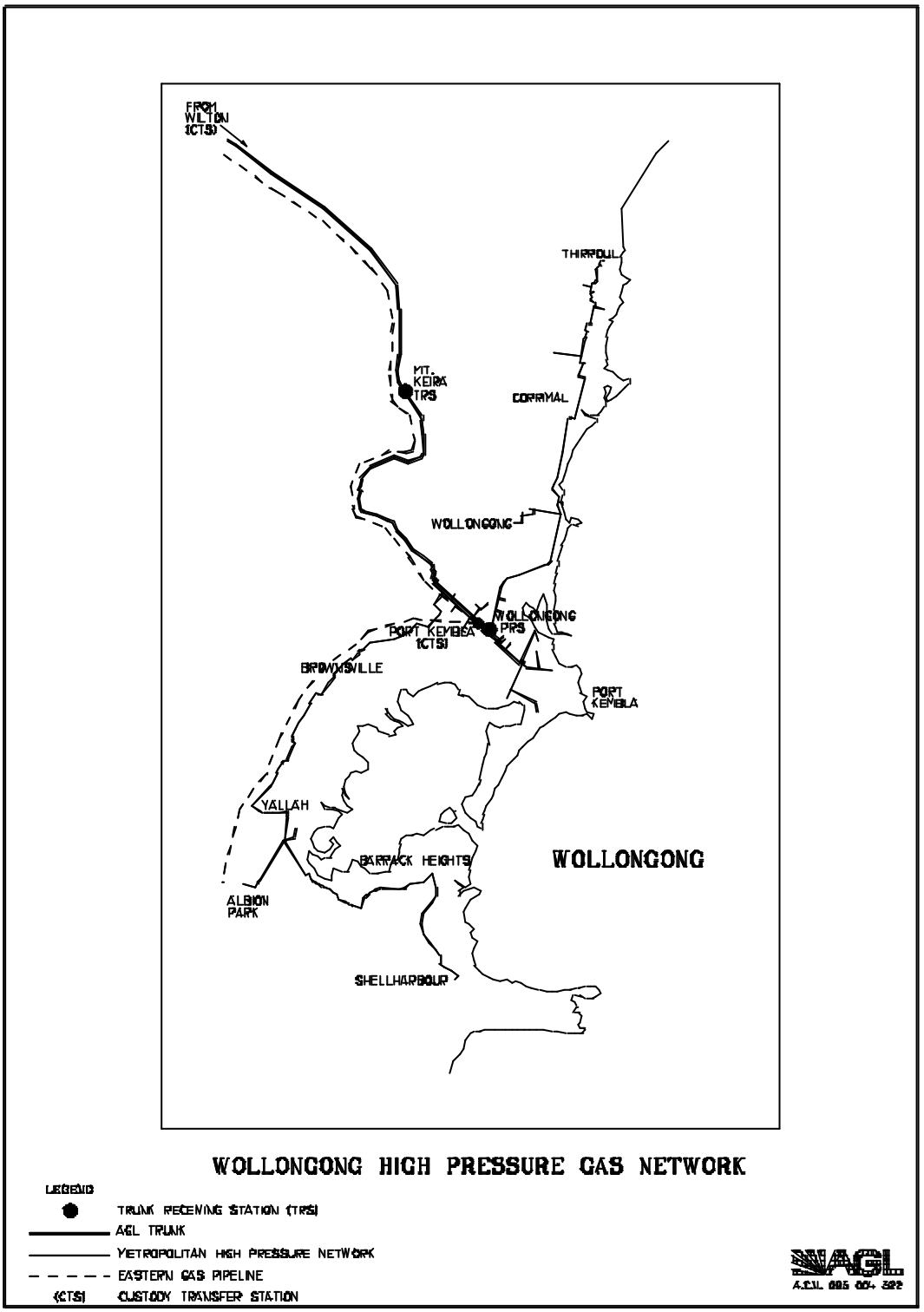
ACN 003 004 322


FROM WILTON (CTS)
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WOLLONGONG
WOLLONGONG PRS
PORT KEMBLA (CTS)
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PORT KEMBLA
YALLAH
BARRACK HEIGHTS
WOLLONGONG
ALBION PARK
SHELLHARBOUR
WOLLONGONG HIGH PRESSURE GAS NETWORK
LEGEND
TRUNK RECEIVING STATION (TRS)
AGL TRUNK
METROPOLITAN HIGH PRESSURE NETWORK
EASTERN GAS PIPELINE
(CTS) CUSTODY TRANSFER STATION
AGL

ATTACHMENT 2

EXTENT OF AGLGN NETWORKS

MAIN							NETWORK DESCRIPTION		LOCAL GOVERNMENT AREAS
	RECEIPT AND SUPPLY POINTS								
	TRS Location	Min. Receipt Pressure (kPa)	Min. Delivery Pressure at Inlet to TRS/POTS	POTS Location	Min. Receipt Pressure (kPa)	Min. Delivery Pressure at Inlet to TRS/POTS	High Pressure	Medium Pressure	
Moomba – Young (APT)				West Wyalong	1,750	1,750		✓	Bland
Young – Lithgow (APT)	Cowra	1,750	1,750				✓	✓	Cowra
	Blayney	1,750	1,750				✓	✓	Blayney
	Orange	1,750	1,750				✓	✓	Orange
				Milthorpe	1,750	1,750		✓	Orange
	Bathurst	1,750	1,750				✓	✓	Bathurst
									Evans
	Oberon	1,750	1,750				✓	✓	Oberon
	Lithgow	1,750	1,750				✓	✓	Greater Lithgow
				Wallerawang	1,750	1,750		✓	Greater Lithgow
	Young	1,750	1,750				✓	✓	Young
	Cootamundra	1,750	1,750					✓	Cootamundra
				Junee	1,750	1,750		✓	Junee
				Coolamon	1,750	1,750		✓	Coolamon
				Ganmain	1,750	1,750		✓	Coolamon
				Narrandera	1,750	1,750		✓	Narrandera
	Rockdale	1,750	1,750					✓	
				Leeton	1,750	1,750	✓	✓	Leeton
				Murrami	1,750	1,750		✓	Narranderra

MAIN							NETWORK DESCRIPTION		LOCAL GOVERNMENT AREAS
	RECEIPT AND SUPPLY POINTS								
	TRS Location	Min. Receipt Pressure (kPa)	Min. Delivery Pressure at Inlet to TRS/POTS	POTS Location	Min. Receipt Pressure (kPa)	Min. Delivery Pressure at Inlet to TRS/POTS	High Pressure	Medium Pressure	
	Yoogali (Griffith)	1,750	1,750				✓	✓	Griffith
Young - Wilton (APT)				Boorowa	1750	1750		✓	Boorowa
				Yass	1750	1750	✓	✓	Yass
	Goulburn	1750	1750				✓	✓	Goulburn
	Marulan	1750	1750				✓	✓	Mulwaree
				Sally's Corner	1750	1750	✓	✓	Wingecarribee
	Mossvale	1750	1750				✓	✓	Mittagong
	Bowral	1750	1750				✓	✓	Wingecarribee
				Bargo	1750	1750		✓	Wingecarribee
Wilton CTS		3,800	3,800						
Wilton-Mt Keira (AGL)	Mt Keira	3,800	2,800				✓	✓	Wollongong Shellharbour Kiama
Mt Keira – Wollongong (AGL)	Wollongong	2,600	1,750				✓	✓	Wollongong Shellharbour Kiama
Wilton-Horsley Park (AGL)	Appin	3,800	1,750				✓	✓	Wollondilly
				Appin	3,800	1,750		✓	Wollondilly
	Campbelltown	3,800	1,750				✓	✓	Sydney (see list)
	West Hoxton	3,800	1,750				✓	✓	

MAIN							NETWORK DESCRIPTION		LOCAL GOVERNMENT AREAS
	RECEIPT AND SUPPLY POINTS								
	TRS Location	Min. Receipt Pressure (kPa)	Min. Delivery Pressure at Inlet to TRS/POTS	POTS Location	Min. Receipt Pressure (kPa)	Min. Delivery Pressure at Inlet to TRS/POTS	High Pressure	Medium Pressure	
Horsley Park-Plumpton (AGL)	Horsley Park	3,800	3,500				✓	✓	Sydney (see list)
	Eastern Creek	3,800	3,500				✓	✓	Sydney (see list)
Plumpton-Kooragang Island (AGL)	Plumpton	3,800	1,750				✓	✓	Sydney (see list)
				Maroota	3,800	1,750		✓	
	Windsor	3,800	1,750				✓	✓	
	Gosford	3,800	1,750				✓	✓	Gosford
				Warnervale	3,800	1,750		✓	Wyong
	Wyong	3,800	1,750				✓	✓	
				Wyee	3,800	1,750		✓	
				Morisset	3,800	1,750		✓	Lake Macquarie
				Minmi	3,800	1,750		✓	Newcastle
	Hexham	3,800	1,750				✓	✓	Maitland
	Kooragang Island	3,800	1,750				✓	✓	Cessnock
									Singleton
									Muswellbrook
									Port Stephens

MAIN							NETWORK DESCRIPTION		LOCAL GOVERNMENT AREAS
	RECEIPT AND SUPPLY POINTS								
	TRS Location	Min. Receipt Pressure (kPa)	Min. Delivery Pressure at Inlet to TRS/POTS	POTS Location	Min. Receipt Pressure (kPa)	Min. Delivery Pressure at Inlet to TRS/POTS	High Pressure	Medium Pressure	
Marsden - Dubbo (APT)	Dubbo	1,750	1,750				✓	✓	Dubbo
				Dubbo West	1,750	1,750		✓	Wellington
				Forbes	1,750	1,750		✓	Forbes
				Parkes	1,750	1,750		✓	Parkes
				Narromine	1,750	1,750		✓	Narromine
Horsley Park CTS (EGP)		3,600	3,600						
Port Kembla CTS (EGP)		2,600	2,600						

7000 kPa

ATTACHMENT 3

ASSESSMENT RATINGS FOR POSTCODES TO DERIVE LOCAL NETWORK CONTRACT PRICE ZONES

SYDNEY	Cost-Reflectivity Drivers				Calculated	Assigned
Postcode	1	2	3	4	Zone	Zone
2000	5	2	3	5	3.75	4
2006	4	2	3	4	3.25	3
2007	4	2	3	4	3.25	3
2009	4	3	4	4	3.75	4
2010	5	2	3	5	3.75	4
2011	5	3	4	5	4.25	4
2015	4	2	2	3	2.75	3
2017	5	2	3	3	3.25	3
2018	5	2	4	3	3.5	4
2019	5	1	2	3	2.75	3
2020	4	1	2	3	2.5	3
2022	5	4	4	4	4.25	4
2028	5	4	4	5	4.5	5
2031	5	4	2	4	3.75	4
2032	5	2	5	5	4.25	4
2033	5	3	2	4	3.5	3
2035	5	2	4	4	3.75	4
2036	5	1	1	3	2.5	3
2039	4	2	4	5	3.75	4
2040	4	1	4	4	3.25	3
2044	4	1	3	3	2.75	3
2046	4	1	3	3	2.75	3
2050	4	2	4	4	3.5	3
2064	4	3	4	4	3.75	4
2065	4	3	3	5	3.75	4
2066	4	2	4	4	3.5	4
2067	4	1	4	5	3.5	4
2076	4	5	5	4	4.5	5
2077	4	5	5	4	4.5	5
2080	4	5	5	4	4.5	5
2085	5	5	5	4	4.75	5
2095	5	5	4	5	4.75	5
2099	5	5	5	4	4.75	5
2100	5	5	4	4	4.5	5
2103	5	5	4	4	4.5	5
2111	4	2	4	4	3.5	4
2112	3	2	3	4	3	3
2113	4	1	2	4	2.75	3
2115	3	3	3	3	3	3
2116	3	1	3	3	2.5	3
2120	3	5	4	4	4	4
2122	3	4	4	4	3.75	4
2128	2	2	4	2	2.5	3
2136	3	2	2	3	2.5	3
2137	3	1	4	3	2.75	3

SYDNEY	Cost-Reflectivity Drivers				Calculated	Assigned
Postcode	1	2	3	4	Zone	Zone
2138	3	1	3	3	2.5	3
2140	3	1	3	3	2.5	3
2141	3	1	2	3	2.25	2
2142	2	1	1	2	1.5	2
2143	2	1	4	2	2.25	2
2144	2	1	3	2	2	2
2145	2	2	3	2	2.25	2
2146	2	2	5	2	2.75	3
2147	2	2	3	2	2.25	2
2148	1	2	2	2	1.75	2
2151	2	3	3	2	2.5	3
2152	2	2	4	2	2.5	3
2154	2	4	4	4	3.5	4
2157	2	4	4	2	3	3
2161	2	1	2	2	1.75	2
2163	2	2	3	2	2.25	2
2164	1	1	1	1	1	1
2165	1	1	3	1	1.5	2
2166	1	3	4	1	2.25	2
2170	1	2	2	1	1.5	2
2171	1	1	2	1	1.25	1
2173	1	3	5	1	2.5	3
2190	3	3	4	2	3	3
2196	3	3	4	4	3.5	4
2199	2	3	5	2	3	3
2200	2	3	3	2	2.5	3
2204	4	2	3	3	3	3
2205	4	1	5	3	3.25	3
2208	3	3	5	3	3.5	4
2211	2	3	4	3	3	3
2212	2	3	4	2	2.75	3
2214	2	4	4	2	3	3
2216	4	1	5	3	3.25	3
2217	4	1	4	3	3	3
2220	3	3	5	3	3.5	4
2228	3	3	5	3	3.5	4
2229	4	3	4	3	3.5	4
2231	5	5	2	3	3.75	4
2232	3	5	3	3	3.5	4
2560	1	3	4	2	2.5	3
2565	1	3	2	1	1.75	2
2566	1	4	4	1	2.5	3
2747	2	1	5	2	2.5	3
2750	3	1	2	2	2	2
2755	2	2	5	2	2.75	3
2756	1	2	4	3	2.5	3
2760	2	1	5	1	2.25	2
2761	1	1	3	1	1.5	1
2762	1	1	3	1	1.5	1
2765	1	3	4	2	2.5	3
2766	1	2	1	1	1	1
2777	3	3	5	3	3.5	4

SYDNEY	Cost-Reflectivity Drivers				Calculated	Assigned
Postcode	1	2	3	4	Zone	Zone
2780	5	5	5	3	4.5	5
Appin	1	1	1	1	1	1

NEWCASTLE	Cost-Reflectivity Drivers				Calculated	Assigned
Postcode	1	2	3	4	Zone	Zone
2250	1	1	1	1	1	1
2256	2	2	2	1	1.75	2
2259	1	1	2	2	1.5	2
2260	2	2	3	2	2.25	2
2261	2	2	2	2	2	2
2262	2	2	3	2	2.25	2
2285	1	2	2	1	1.5	1
2290	3	3	3	1	2.5	3
2294	1	1	2	2	1.5	2
2298	2	2	3	2	2.25	2
2300	2	2	3	3	2.5	3
2304	1	1	1	2	1.25	1
2305	1	3	3	2	2.25	2
2308	2	2	1	1	1.5	1
2314	3	3	3	1	2.5	3
2320	3	3	2	1	2.25	2
2322	1	1	1	1	1	1
2323	2	2	2	1	1.75	2
2324	3	3	3	1	2.5	3
2325	3	3	3	1	2.5	3
2326	3	3	2	1	2.25	2
2330	3	3	2	1	2.25	3

WOLLONGONG	Cost-Reflectivity Drivers				Calculated	Assigned
Postcode	1	2	3	4	Zone	Zone
2500	2	2	2	3	2.25	2
2505	2	2	3	2	2.25	2
2505-BHP	1	1	1	1	1	1
2516	3	3	3	2	2.75	3
2526	2	3	2	2	2.25	2
2527	3	3	3	2	2.75	3

EXPLANATORY NOTE:

Each postcode within Sydney is assigned to one of five price zones. Each postcode within Newcastle and Wollongong is assigned to one of three price zones. The postcodes are grouped into zones based on an evaluation of the following "cost reflectivity drivers":

1. the relative location of the postcode to the Trunk main;
2. relative distance of the postcode from the Primary mains;
3. the utilisation of assets by both Contract and Tariff customers;
4. the construction costs of mains in the geographical location.

In the above table, each postcode is given assessment ratings for each of the cost reflectivity drivers. The postcodes in Sydney are rated on the basis of 1 to 5, the rating of 1 being the most cost reflective and 5 being the least cost reflective. In the case of the smaller regions of Newcastle and Wollongong, the postcodes are rated on the basis of 1 to 3.

ATTACHMENT 4

INDEX OF NATIONAL ACCESS CODE ATTACHMENT A TO THIS ACCESS ARRANGEMENT INFORMATION

Categories of information to be disclosed as apart of the Access Arrangement Information

Category in Access Code	Reference in Revised Access Arrangement Information
Category 1: Information regarding Access and Pricing Principles	
Tariff determination methodology	2.1
Cost Allocation approach	2.2
Incentive structure	2.3
Category 2: Information regarding Capital Costs	
Asset values for each pricing zone, service or category of asset	Attachment 5
Information as to asset valuation methodologies – historical cost or asset valuation	4.1.1 and Section 9
Assumptions on life of asset for depreciation	4.2
Depreciation	4.2
Accumulated depreciation	4.2
Committed capital works and capital investment	4.3.4
Description of nature and justification for planned capital investment	4.3
Rates of return – on equity and on debt	4.6
Parameters used to determine WACC	4.6.1
Category 3: Information regarding Operations and Maintenance Costs	
Fixed versus variable costs	5.3.2
Cost allocation between zones, services or categories of asset and between regulated and unregulated	Sections 7 and 8
Wages and Salaries – by pricing zone, service or asset category	5.4
Cost of services by other including rental equipment	5.4
Gas used in operations – unaccounted for gas to be separated from compressor fuel	5.2
Materials and supply	5.4
Property Taxes	5.4
Category 4: Information on Overheads and Marketing Costs	5.3.2
Total service provider costs at corporate level	
Allocation of costs between regulated and unregulated segments	5.3.2
Allocation of costs between particular zones, services or categories of asset	Sections 7 and 8
Category 5: Information regarding System Capacity and Volume assumptions	
Description of system capabilities	Section 9

Category in Access Code	Reference in Revised Access Arrangement Information
Map of piping system – pipe sizes, distances and maximum delivery capability	Section 9 and Attachments 1 and 2
Average daily and peak demand at "city gates" defined by volume and pressure	9.2.2
Annual volume across each pricing zone, service or category of asset	9.2.3
System load profile by month in each pricing zone, service or category of asset	9.2.2
Total Number of customers in each pricing zone, service or category of asset	9.2.3
Category 6: Information regarding Key Performance Indicators	
Industry KPIs used by regulator to assess "reasonable incurred" costs	Section 10
Service provider's KPIs for each pricing zone, service or category of asset	Section 10

ATTACHMENT 5

ASSET VALUATIONS OF TRUNK ZONES AND DISTRIBUTION SYSTEM REGIONS

Contract Segment Allocation Of Trunk Pipeline Asset Values

Region	Asset Value 30/6/2005* ($M)	Contract Market Share (derived from Fully Distributed Methodology) ($M)
Zone 1	11.5	5.2
Zone 2	18.1	8.1
Zone 3	21.2	10.8
Zone 4	23.5	18.0
Zone 5	25.2	19.5
Zone 6	24.7	20.7
Total Wilton-Newcastle	**124.2**	**82.2**
Zone 7 Wilton-Wollongong	**10.6**	**2.0**

*Forecast 2004/05

Contract Segment Allocation Of Local Network Asset Values

Region	Asset Value 30/6/2005* ($M)	Contract Market Share (derived from Fully Distributed Methodology) ($M)
Sydney	1460.5	129.0
Newcastle	167.7	31.5
Wollongong	72.5	4.1
Country	132.1	27.3
Total	**1832.8**	**191.9**

* Forecast 2004/05