



ACCESS ARRANGEMENT

for AGN's

South Australian Gas Distribution Network

1 July 2016 – 30 June 2021

(Incorporating revisions required by AER Final Decision 26 May 2016)

May 2016

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1. INTRODUCTION

1.1 Purpose of this Document

Australian Gas Networks Limited (ABN 19 078 551 685) (**AGN**) submits this revision to its Access Arrangement for its South Australian Gas Distribution System (the **Network**) in accordance with section 10.1 of its Access Arrangement and Rule 52 of the National Gas Rules 2008 (**Rules**).

AGN is the owner of the Network and not a local agent of a Service Provider, nor is it acting on behalf of another Service Provider.

The geographical spread of the Network is shown in Annexure A, with further detail provided in the Access Arrangement Information. A description of the Network can be found at www.AustralianGasNetworks.com.au.

This Access Arrangement as revised describes the terms and conditions on which access will be granted to the Network, and contains the required elements of an Access Arrangement as described in Rule 48 of the Rules. This Access Arrangement is accompanied by a revised Access Arrangement Information.

1.2 Revisions Commencement Date

Revisions to the Access Arrangement will come into effect on the later of 1 July 2016 and the date on which the revisions to the Access Arrangement take effect in accordance with the Rules.

1.3 Definitions and Interpretation

In this Access Arrangement and the Access Arrangement Information, unless the context indicates otherwise:

- (a) where a word or phrase begins with a capital letter:
 - (1) it has the meaning given to it in the glossary that is set out in section 10 of this Access Arrangement;
 - (2) if it is not defined in the glossary, it has the meaning given to it in the Rules; and
 - (3) a reference to a "Rule" is a reference to the relevant section of the Rules.
- (b) where a word or phrase is defined, its other grammatical forms have a corresponding meaning; and
- (c) headings are for convenience only and do not affect interpretation.

1.4 Contact Details

The contact person for further details in relation to this Access Arrangement is:

Mr Craig de Laine
General Manager, Regulation
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Level 6, 400 King William Street
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2. SERVICES

2.1 General

The Network Services which AGN will make available to Network Users and Prospective Network Users in accordance with the Rules comprise:

- (a) Haulage Reference Services, which are described in section 2.2;
- (b) Ancillary Reference Services, which are described in section 2.3; and
- (c) Negotiated Services, which are described in section 2.4.

To the extent practicable and reasonable, a Network User or Prospective Network User may obtain a Network Service which includes only those elements that the Network User or Prospective Network User wishes to be included in the Network Service.

To the extent practicable and reasonable, AGN will provide a separate Tariff for an element of a Network Service if requested to do so by a Network User or Prospective Network User.

AGN has no associate contracts (as defined in the National Gas Law).

2.2 Haulage Reference Services

2.2.1 Domestic Haulage Service

The Domestic Haulage Service is a Haulage Reference Service that comprises the delivery of Gas through an existing Domestic Delivery Point in accordance with, and subject to, the terms and conditions referred to in section 6.

A Delivery Point (**DP**) is a Domestic DP for a given period if the Gas delivered through that DP during that period was used primarily for domestic purposes. Gas will have been used primarily for domestic purposes if 50 percent or more of that Gas was used for domestic purposes.

AGN will determine from time to time whether Gas delivered through a DP during any period was used primarily for domestic purposes or primarily for other purposes. AGN's determination will bind the Network User, unless proven incorrect.

2.2.2 Demand Haulage Service

The Demand Haulage Service is a Haulage Reference Service that comprises the delivery of Gas through an existing Demand DP, in accordance with, and subject to, the terms and conditions referred to in section 6.

A DP is a Demand DP at a given time if:

- (a) that DP is not a Domestic DP at that time; and
- (b) the Quantity of Gas delivered through that DP during the then most recent Metering Year was equal to or greater than 10TJ in total.

In this section, a reference to the Quantity of Gas delivered is a reference to Gas delivered whether to or for the account of the Network User or another person or persons.

The tariff in relation to Demand DPs is based on MDQ.

2.2.3 Commercial Haulage Service

The Commercial Haulage Service is a Haulage Reference Service that comprises the delivery of Gas through a Commercial DP in accordance with, and subject to, the terms and conditions referred to in section 6.

A DP is a Commercial DP at a given time if that DP is not a Demand DP or a Domestic DP at that time.

2.2.4 Classification of New DPs

AGN will classify a new DP as a Domestic DP, a Demand DP or a Commercial DP. In determining the classification of a DP, AGN will take into account:

- (a) the Network User or Prospective Network User's stated demand and connection characteristics for the DP; and

- (b) Reference Tariffs assigned to DPs with the same or materially similar demand and connection characteristics.

A new DP classified by AGN as a Domestic DP, a Demand DP or a Commercial DP will be treated as a Domestic DP, a Demand DP or a Commercial DP (as the case may be) for the purposes of this Access Arrangement (and for the purposes of each Agreement) until such time as it becomes apparent to AGN that another classification is appropriate. The Reference Tariff applicable in respect of the DP will be determined from time to time on the basis of the classification of that DP.

2.2.5 *Associated Services*

As a part of each Haulage Reference Service, AGN will also provide meter reading data on a quarterly basis for Domestic DPs and Commercial DPs and on a daily basis for Demand DPs in accordance with, and subject to, the terms and conditions referred to in section 6.

For the avoidance of doubt, Unaccounted for Gas is supplied by AGN. The cost of Unaccounted for Gas has been taken into account in the determination of the Reference Tariffs.

The Haulage Reference Services do not include any of the Network Services described as Ancillary Reference Services (see section 2.3) or Negotiated Services (see section 2.4).

2.3 **Ancillary Reference Services**

The Ancillary Reference Services comprise the following Network Services:

- (a) Special Meter Reading – this Reference Service comprises a meter reading for a DP and provision of the associated meter reading data, that is in addition to the scheduled meter readings that form part of the Haulage Reference Services described in section 2.2 above;
- (b) Disconnection – this Reference Service comprises the use of locks or plugs at the Metering Installation of a Domestic or Commercial DP in order to prevent the withdrawal of Gas at the DP;
- (c) Reconnection – this Reference Service comprises action to restore the ability to withdraw Gas at a DP, following an earlier Disconnection (that is, the removal of any locks or plugs used to isolate supply, performance of a safety check and, where necessary, the lighting of appliances).
- (d) *Meter and Gas Installation Test* – on-site testing to check the measurement accuracy of a Metering Installation and the soundness of the gas installation downstream of the Metering Installation;
- (e) *Meter Removal* – removal of a meter at a Metering Installation in order to prevent the withdrawal of natural gas at the DP; and
- (f) *Meter Reinstallation* – reinstallation of a meter at a Metering Installation, performance of a safety check and the lighting of appliances where necessary.

Each Ancillary Reference Service will be provided in accordance with, and subject to, the terms and conditions referred to in section 6.

2.4 **Negotiated Services**

Any Network User or Prospective Network User may request AGN to provide a Negotiated Service. A Negotiated Service is a Network Service that is different from the Reference Services.

The terms and conditions on which AGN will provide Negotiated Services will be the same as the terms and conditions referred to in section 6, where AGN determines that those terms and conditions are appropriate and applicable to the requested Negotiated Service.

2.5 Gas Balancing

Gas balancing refers to the process of ensuring that the Quantity of Gas delivered through DPs to or for the account of a Network User is equivalent to the Quantity of Gas delivered through Receipt Points by or for the account of the Network User.

In the case of the Adelaide Metropolitan Network, gas balancing is regulated through the short term trading market established pursuant to the National Gas Rules (as amended by the National Gas (Short Term Trading Market) Amendment Rules 2010).

In the case of the remainder of the Network, gas balancing is regulated through the Retail Market Procedures (and, in particular, chapter 5 of the Retail Market Procedures).

Network Users and Prospective network users should familiarise themselves with the National Gas Rules and the Retail Market Procedures and satisfy themselves that their interest in relation to gas balancing is appropriately protected. AGN is not responsible to ensure that the Quantity of Gas delivered through a Receipt Point, by or for the account of a Network User, will be delivered through DPs to or for the amount of that Network User. AGN takes no responsibility for gas balancing within the Network or within any Sub-Network.

2.6 Network Service Standards

AGN will provide each Network Service, including each Reference Service, in accordance with, and subject to, the requirements of any Distribution Licence or applicable law.

3. REFERENCE TARIFFS

3.1 Haulage Reference Tariffs

The Reference Tariffs for the Domestic Haulage Service, Commercial Haulage Service and Demand Haulage Service are known as “Tariff R”, “Tariff C and “Tariff D” respectively. The Tariff Schedule set out as Annexure B to this Access Arrangement shows the initial Reference Tariffs that will apply to Reference Services.

The initial Reference Tariffs will apply from the commencement of the Fourth Access Arrangement Period (1 July 2016), until those Reference Tariffs are varied in accordance with section 4 of this Access Arrangement.

The Charges payable under Tariff D vary according to the Region of the Network in which the Demand DP is located. The Network comprises seven Regions. They are the Adelaide Region, the Peterborough Region, the Port Pirie Region, the Riverland Region, the South East Region, the Whyalla Region and the Tanunda Region. These are shown on the map set out in Annexure C.

In the case of a Demand DP within the Adelaide Region, the Charges payable under Tariff D also vary according to the Zone within which the DP is located. There are three Zones, which are shown on the map set out in Annexure D.

The Reference Tariffs for Reference Services will be set out in Tariff Schedules that AGN will publish from time to time on its website at “www.AGN.com.au”.

3.2 Ancillary Reference Service

The initial Ancillary Reference Tariffs are set out in Table 5 of the Tariff Schedule in Annexure B. These tariffs will increase by CPI on 1 July 2016 and thereafter by CPI for each remaining year of the Fourth Access Arrangement Period.

4. REFERENCE TARIFF POLICY – GENERAL

4.1 Determination of Reference Tariffs

Reference Tariffs have been determined based on a revenue requirement that uses a “building block” approach. This approach provides for total revenue to be calculated on the basis of a rate of return on the capital base plus depreciation plus non-capital costs associated with operating the Network plus the cost of corporate income tax plus/minus any amounts earned through incentive arrangements.

A CPI-X approach to determining Haulage Reference Tariffs has been adopted, using a tariff basket approach to price control. To ensure price stability, Reference Tariffs for the Access Arrangement period have been set on the basis of a “smoothed” revenue requirement, so that Reference Tariffs move in a uniform and consistent manner.

Reference Tariffs are designed to meet the objectives of the Rules. A key objective of the Rules is to recover the efficient costs of providing Reference Services, with emphasis on the safety and integrity of the Network, while providing certainty to Users and signalling appropriate development of the market through extension of the Network.

The Reference Tariffs are designed to be cost reflective, so that Reference Tariffs recover the efficient cost of providing the relevant Reference Service. The revenues associated with the Reference Tariffs have been set between incremental and stand-alone costs.

4.2 Assignment of Haulage Reference Tariffs

Where AGN is charging a particular Haulage Reference Tariff in respect of a particular DP, then that particular Haulage Reference Tariff is to be regarded as being “assigned” to that DP.

Haulage Reference Tariffs will be assigned to DPs in accordance with the criteria set out in sections 2.2.1-2.2.4 of this Access Arrangement.

4.3 Reference Tariff Variation Mechanism

Rule 97 allows Reference Tariffs to vary within an Access Arrangement Period through a Reference Tariff Variation mechanism. For the purposes of this Access Arrangement, Reference Tariffs will be varied through two mechanisms, namely:

- (a) Reference Tariff Control Formulae, as described in section 4.4; and
- (b) a Cost Pass Through Event Adjustment, which is described in section 4.5.

Variations to Reference Tariffs are subject to the Regulator’s approval (or deemed approval) in accordance with the Rules and this section 4.

AGN will publish a revised Tariff Schedule on its website at www.AustralianGasNetworks.com.au whenever variations to Reference Tariffs have been approved.

4.4 Reference Tariff Control Formulae

4.4.1 Haulage Reference Tariffs

Subject to the approval of the Regulator under the Rules, AGN can vary the Reference Tariffs for Haulage Reference Services from time to time provided that the variations comply with the five Reference Tariff Control Formulae set out in Annexure E to this Access Arrangement.

The first Reference Tariff Control Formula is designed to ensure that the average revenue (in \$/GJ) that AGN receives from Haulage Reference Services after 30 June 2016 does not increase, as a result of any proposed variation to Reference Tariffs, at a rate that is greater than the change in CPI – X (where X is the factor described in Annexure E).

The second Reference Tariff Control Formula is designed to ensure that the average revenue (in \$/GJ or \$/GJ of MDQ) that AGN receives from any single type of Haulage Reference Service (or Tariff Class), after any proposed variation to Reference Tariffs, does not increase by more

than $CPI - X + Y$, where Y is 2%.

Both of these Reference Tariff Control Formulae set out in Annexure E compare the revenue from the pre-existing Reference Tariffs with revenue from the Reference Tariffs as varied, based on the Quantities of Gas (or other units of measurement, such as GJ of MDQ) that applied in the year two years prior to the year in which the Reference Tariffs are to be varied. These historical quantities are to be audited.

The third Reference Tariff Control Formula implements the annual update to the return on debt building block required as a result of the adoption of a trailing average approach to determining the cost of debt.

The fourth Reference Tariff Control Formula determines the adjustment factor to accommodate price variations in unaccounted for gas.

The fifth Reference Tariff Control Formula determines the adjustment factor to accommodate approved cost pass through events.

Variations to the Reference Tariffs may be effected:

- (a) through changes in the components, elements or variables comprised within any Reference Tariff (such as a change in the base charge or fixed charge within the Reference Tariff or a change in the steps, or the level of the steps, within the Reference Tariff);
- (b) through the introduction of a new Reference Tariff for any Haulage Reference Service;
- (c) through the withdrawal of any Reference Tariff; or
- (d) through any combination of these changes.

4.4.2 Ancillary Reference Services

Subject to the approval of the Regulator, AGN will have the right to vary the Reference Tariffs for Ancillary Reference Services, initially on 1 July 2016, and thereafter annually during the Fourth Access Arrangement Period, on the basis of the following Reference Tariff Control Formula:

$$ART_t = ART_{t-1} \times (1 + CPI_t)$$

where:

ART_t is the Reference Tariff that will apply to an Ancillary Reference Service in year t ;

ART_{t-1} is the Reference Tariff that applied to that Ancillary Reference Service in year $t-1$; and

CPI_t is the annual percentage change in the ABS CPI All Groups, Weighted Average of Eight Capital Cities from the December quarter in year $t-2$ to the December quarter in year $t-1$, calculated using the following method:

The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the December quarter in financial year $t-1$

divided by

The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the December quarter in financial year $t-2$

minus one.

If the ABS does not, or ceases to, publish the index, then CPI will mean an index which the AER

considers is the best available alternative index.

Where the Reference Tariff for an Ancillary Reference Service (as varied) is less than \$20, the Reference Tariff (as varied) will be rounded to the nearest 10 cents (with five cents rounded upwards). Where the Reference Tariff for an Ancillary Reference Service (as varied) is \$20 or more, the Reference Tariff (as varied) will be rounded to the nearest dollar (with 50 cents rounded upwards).

4.5 Cost Pass Through Event Adjustment

Subject to the approval of the Regulator under the NGR, Reference Tariffs may be varied after one or more Cost Pass Through Event/s occurs, in which each individual event materially increases or materially decreases the cost of providing the Reference Services. Any such variation will take effect from the next 1 July.

In making its decision on whether to approve the proposed Cost Pass Through Event variation, the AER must take into account the following:

- the costs to be passed through are for the delivery of Network Services;
- the costs are incremental to costs already allowed for in Reference Tariffs;
- the total costs to be passed through are building block components of total revenue;
- the costs to be passed through meet the relevant National Gas Rules criteria for determining the building block for total revenue in determining reference services;
- the efficiency of AGN's decisions and actions in relation to the risk of the Relevant Pass Through Event, including whether AGN has failed to take any action that could reasonably be taken to reduce the magnitude of the costs incurred as a result of the Relevant Pass Through Event and whether AGN has taken or omitted to take any action where such action or omission has increased the magnitude of the costs; and
- any other factors the AER considers relevant and consistent with the NGR and NGL.

Cost Pass Through Events are:

- a Regulatory Change Event;
- a Service Standard Event;
- a Tax Change Event;
- a Terrorism Event;
- a Network User Failure Event;
- an Insurer Credit Risk Event;
- an Insurance Cap Event; and
- a Natural Disaster Event.

where

'Regulatory Change Event' means:

A change in a regulatory obligation or requirement that:

- (a) falls within no other category of pass through event; and

- (b) occurs during the course of an access arrangement period; and
- (c) substantially affects the manner in which AGN provides Reference Services; and
- (d) materially increases or materially decreases the costs of providing those services.

'Service Standard Event' means:

A legislative or administrative act or decision that:

- (a) has the effect of:
 - (i) substantially varying, during the course of an access arrangement period, the manner in which AGN is required to provide the Reference Service; or
 - (ii) imposing, removing or varying, during the course of an access arrangement period, minimum service standards applicable to the Reference Service; or
 - (iii) altering, during the course of an access arrangement period, the nature or scope of the Reference Service, provided by AGN; and
- (b) materially increases or materially decreases the costs to AGN of providing the Reference Service.

'Tax Change Event' means:

A tax change event occurs if any of the following occurs during the course of an access arrangement period for AGN:

- (a) a change in a Relevant Tax, in the application or official interpretation of a Relevant Tax, in the rate of a Relevant Tax, or in the way a Relevant Tax is calculated;
- (b) the removal of a Relevant Tax;
- (c) the imposition of a Relevant Tax; and

in consequence, the costs to AGN of providing prescribed reference services are materially increased or decreased.

'Terrorism Event' means:

An act (including, but not limited to, the use of force or violence or the threat of force or violence) of any person or group of persons (whether acting alone or on behalf of or in connection with any organisation or government), which:

- (a) from its nature or context is done for, or in connection with, political, religious, ideological, ethnic or similar purposes or reasons (including the intention to influence or intimidate any government and/or put the public, or any section of the public, in fear); and
- (b) increases the costs to AGN of providing the Reference Service.

Note for the avoidance of doubt, in making a determination on a Terrorism Event, the AER will have regard to, amongst other things:

- (i) whether AGN has insurance against the event;

- (ii) the level of insurance that an efficient and prudent service provider would obtain in respect of the event; and
- (iii) whether a declaration has been made by a relevant government authority that an act of terrorism has occurred.

'Network User Failure Event' means:

The occurrence of an event where:

- (a) a Retailer of Last Resort (RoLR) Event as defined in section 122 of the National Energy Retail Law has occurred; and
- (b) AGN incurs costs in responding to the RoLR event in accordance with its obligations under the NERL, NERR, NGL or NGR (including Guidelines and procedures that are binding under those instruments), and
- (c) the costs are not recoverable by AGN under other provisions of the NERL, NERR, NGL or NGR as in force at the time of the event, including but not limited to rule 531 of the NGR and other pass through events in this Access Arrangement.

Note for the avoidance of doubt, in making a determination on a Network User Failure Event, the AER will have regard to, amongst other things, the extent to which AGN has taken steps to minimise the costs associated with its responsibilities in a RoLR Event, both prior to, and after, the RoLR Event was triggered.

'Insurer Credit Risk Event' means:

An event where:

- (a) an insurer of AGN becomes insolvent; and
- (b) as a result, in respect of an existing, or potential, claim for a risk that was insured by the insolvent insurer, AGN:
 - (i) is subject to a higher or lower claim limit or a higher or lower deductible than would have otherwise applied under the insolvent insurer's policy; or
 - (ii) incurs additional costs associated with self-funding an insurance claim, which would otherwise have been covered by the insolvent insurer.

Note for the avoidance of doubt, in making a determination on an Insurer Credit Risk Event, the AER will have regard to, amongst other things:

- (a) AGN's attempts to mitigate and prevent the event from occurring by reviewing and considering the insurer's track record, size, credit rating and reputation; and
- (b) in the event that a claim would have been made after the insurance provider became insolvent, whether AGN had reasonable opportunity to insure the risk with a different insurer.

'Insurance Cap Event' means:

An event where:

- (a) AGN makes a claim or claims and receives the benefit of a payment or payments under a relevant insurance policy;

- (b) AGN incurs costs beyond the relevant policy limit; and
- (c) the costs beyond the relevant policy limit increase the costs to AGN of providing the Reference Service.

For this Insurance Cap Event:

- (d) a relevant insurance policy is an insurance policy held during the Access Arrangement Period or a previous period in which access to the pipeline services was regulated; and
- (e) AGN will be deemed to have made a claim on a relevant insurance policy if the claim is made by a related party of AGN in relation to any aspect of the Network of AGN's business.

Note for the avoidance of doubt, in making a determination on an Insurance Cap Event, the AER will have regard to, amongst other things:

- (i) the insurance policy for the event;
- (ii) the level of insurance that an efficient and prudent service provider would obtain in respect of the event; and
- (iii) any assessment by the AER of AGN's insurance in approving the access arrangement for the South Australian gas distribution network for the relevant period.

'Natural Disaster Event' means:

Any natural disaster including but not limited to fire, flood or earthquake that occurs during the Access Arrangement Period that increases the cost to the Service Provider in providing the Reference Service, provided the fire, flood or other event was not a consequence of the acts or omissions of AGN.

Note for the avoidance of doubt, in making a determination on a Natural Disaster Event, the AER will have regard to, amongst other things:

- (i) whether AGN has insurance against the event; and
- (ii) the level of insurance that an efficient and prudent service provider would obtain in respect of the event.

Materiality threshold is defined as:

For the purpose of any defined event, an event is considered to materially increase or decrease costs where that event has an impact of one per cent of the smoothed forecast revenue specified in the Access Arrangement Information, in the years of the access arrangement period that the costs are incurred.

4.6 Procedure for Variation in Reference Tariffs

4.6.1 Routine Variations

AGN will notify the Regulator in respect of any Reference Tariff variations at least 50 business days before the date of implementation and include:

- (a) the proposed variations to the Reference Tariffs; and
- (b) an explanation and details of how the proposed variations have been calculated.

If AGN proposes variations to the Reference Tariffs (other than as a result of a Cost Pass Through Event) and those variations have not been approved by the next 1 July then the Reference Tariffs will be varied as proposed by AGN until such time as variations to Reference Tariffs are approved by the Regulator.

If it appears that any past tariff variation contains a material error or deficiency because of a clerical mistake, accidental slip or omission, miscalculation or misdescription, the AER may change subsequent tariffs to account for these past issues.

Within 30 Business Days of receiving the Service Provider's Variation Notice, the AER will inform the Service Provider in writing of whether or not it has verified the proposed Haulage Reference Tariff and/or Haulage Reference Tariff Components in the Service Provider's Variation Notice as compliant with the Annual Tariff Variation Mechanism.

The 30 Business Day periods may be extended for the time taken by the AER to obtain information from the Service Provider, obtain expert advice or consult about the notification. However, the AER must assess a cost pass through application within 90 Business Days, including any extension of the decision making time.

4.6.2 Cost Pass Through Event Variations

AGN will notify the AER of Cost Pass Through Events within 90 business days of the Cost Pass Through Event occurring, whether the Cost Pass Through Event would lead to an increase or decrease in Reference Tariffs.

When the costs of the Cost Pass Through Event incurred are known (or able to be estimated to a reasonable extent), then those costs shall be notified to the AER. When making such notification to the AER, AGN will provide the AER with a statement, signed by an authorised officer of AGN, verifying that the costs of any Cost Pass Through Events are net of any payments made by an insurer or third party which partially or wholly offsets the financial impact of that event (including self insurance).

The AER must notify AGN of its decision to approve or reject the proposed variations within 90 Business Days of receiving the notification. This period will be extended for the time taken by the Regulator to obtain information from AGN, obtain expert advice or consult about the notification.

The AER will endeavour to make its decision on whether AGN should vary Reference Tariffs due to the occurrence of a Cost Pass Through Event within 90 business days of receiving a notification from AGN. The overall time period for approving a Cost Pass Through Event is 120 business days.

4.7 Notice to Network Users

AGN will notify Users as soon as practicable if it proposes any variations to any Reference Tariffs (whether as a result of a Cost Pass Through Event or otherwise).

4.8 New Tariff Schedule

Whenever any Reference Tariff is varied in accordance with this section 4, AGN will publish a Tariff Schedule on its website at www.AustralianGasNetworks.com.au, showing the Reference Tariffs (as varied) for the Reference Services.

4.9 Regulator's Decision is Conclusive

The Regulator's decision to allow a proposed variation in Reference Tariffs will be binding and conclusive on Network Users as to the Reference Tariffs that apply to Reference Services. Network

Users will not have the right to challenge or otherwise dispute the Reference Tariffs as allowed from time to time by the Regulator or the basis on which those Reference Tariffs were calculated or determined.

4.10 Default Tariffs for the Fifth Access Arrangement Period

If revisions pertaining to the Fifth Access Arrangement Period have not come into effect by 1 July 2021, then:

- (a) the Reference Tariffs for the Haulage Reference Services for the period between 1 July 2021 and the date the revisions come into effect will be adjusted on 1 July each year by AGN, commencing on 1 July 2021, in a manner that is designed to change the average price per GJ (or per GJ of MDQ) for each Reference Tariff by the percentage change in the CPI; and
- (b) the Reference Tariffs for the Ancillary Reference Services for the period between 1 July 2021 and the date the revisions come into effect will be adjusted on 1 July each year by AGN, commencing on 1 July 2021, by the percentage change in the CPI.

4.11 Treatment of Capital Expenditure for 2015/16

In rolling forward the Capital Base, the capital expenditure for 2015/16 is as set out in the Roll Forward Model as approved in the AER's final decision. Prior to commencement of the Fifth Access Arrangement Period, the actual capital expenditure for 2015/16 will be known.

Any difference between this estimated capital expenditure and actual capital expenditure for 2015/16 is to be taken into account when the roll-forward occurs at the next review, prior to the commencement of the Fifth Access Arrangement Period, in accordance with Rule 77(2)(a).

5. REFERENCE TARIFF POLICY – INCENTIVE MECHANISMS

5.1 Efficiency Carryover Mechanism

An efficiency carryover mechanism will apply to operating expenditure.

The incentive mechanism will operate in the following way:

- i. AGN will retain the benefit of actual operating expenditure being lower, or incur the cost of actual operating expenditure being higher, than forecast operating expenditure included in the Total Revenue in each Financial Year of the Access Arrangement Period;
- ii. the mechanism carries forward AGN's incremental efficiency gains (or losses) for five Financial Years from the Financial Year those gains (or losses) occur;
- iii. annual carryover amounts accrue in each Financial Year of the subsequent access arrangement period as the summation of the incremental efficiency gains (or losses) in the immediately prior access arrangement period that are carried forward for five years or less into the Financial Year; and
- iv. the annual carryover amounts are added to AGN's total revenue in each Financial Year of the subsequent access arrangement period. If necessary, the annual efficiency gain (or loss) is carried forward into the access arrangement period commencing 1 July 2021 until it has been retained by the Service Provider for a period of five years.

- (a) The incremental efficiency gain (loss) for financial year 2016–17 will be estimated using calculated using:

$$E_{2016-17} = (F_{2016-17} - A_{2016-17}) - (F_{2015-16} - A_{2015-16}) + (F_{2014-15} - A_{2014-15}) - \text{non-recurrent efficiency gains}_{2014-15}$$

where

$E_{2016-17}$ is the incremental efficiency gain (loss) for financial year 2016-17.

$F_{2016-17}$ is the forecast operating expenditure for financial year 2016-17.

$A_{2016-17}$ is the actual operating expenditure for financial year 2016-17.

$F_{2015-16}$ is the forecast operating expenditure for financial year 2015-16.

$A_{2015-16}$ is the actual operating expenditure for financial year 2015-16.

$F_{2014-15}$ is the forecast operating expenditure for financial year 2014-15.

$A_{2014-15}$ is the actual operating expenditure for financial year 2014-15.

Non-recurrent efficiency gains₂₀₁₄₋₁₅ is the adjustment made to base year (2014–15) opex used to forecast opex for the 2016–21 access arrangement period to account for opex associated with one-off factors.

- (b) The incremental efficiency gain (or loss) for financial years 2017-18 to 2019-20 (inclusive) will be calculated using:

$$E_i = (F_i - A_i) - (F_{(i-1)} - A_{(i-1)})$$

where

E_i is the incremental efficiency gain in financial year i of the access arrangement period.

F_i is the forecast operating expenditure in financial year i of the access arrangement period.

A_i is the actual operating expenditure in financial year i of the access arrangement period.

F_{i-1} is the forecast operating expenditure in financial year $i-1$ of the access arrangement period.

A_{i-1} is the actual operating expenditure in financial year $i-1$ of the access arrangement period.

- (c) Actual operating expenditure in the final financial year of the access arrangement period is to be estimated using:

$$A^*_f = F_f - (F_b - A_b) + \text{non recurrent efficiency gains}_b$$

where

A^*_f is the estimate of opex for the final year of the access arrangement.

F_f is the forecast opex for the final year of the access arrangement period.

F_b is the forecast opex for the base year used to forecast opex in the access arrangement period following this access arrangement.

A_b is the actual opex for the base year used to forecast opex in the access arrangement period following this access arrangement.

Non-recurrent efficiency gains_b is the adjustment made to base year opex used to forecast opex for the access arrangement period expected to commence 1 July 2021 to account for opex associated with one-off factors.

- (d) The carryover amount for final financial year of the access arrangement period, is to be estimated using the following equation:

$$E_f = (F_f - A^*_f) - (F_{f-1} - A_{f-1})$$

where

E_f is the incremental efficiency gain for the final year of the access arrangement, expected to be the financial year 2020–21.

F_f is the forecast opex for the final year of the access arrangement.

A^*_f is the estimate of opex for the final year of the access arrangement period.

- (e) The carryover amount for the first year of the subsequent access arrangement period, expected to commence 1 July 2021, is to be estimated using:

$$E_{1,t+1} = (F_{1,t+1} - A_{1,t+1}) - (F_f - A_f) + (F_b - A_b) - \text{non-recurrent efficiency gains}_b$$

where

$E_{1,t+1}$ is the incremental efficiency gain (loss) for the first financial year of the access arrangement following this access arrangement.

$F_{1,t+1}$ is the forecast operating expenditure for the first financial year of the access arrangement following this access arrangement.

$A_{1,t+1}$ is the actual operating expenditure for the first financial year of the access arrangement following this access arrangement.

F_f is the forecast operating expenditure for the final year of the 2016–21 access arrangement period.

A_f is the actual operating expenditure for the final year of the 2016–21 access arrangement period.

F_b is the forecast operating expenditure for the base year used to forecast opex in the access arrangement period following this access arrangement.

A_b is the actual operating expenditure for the base year used to forecast opex in the access arrangement period following this access arrangement.

Non-recurrent efficiency gains_b is the adjustment made to base year opex used to forecast opex for the access arrangement period following this access arrangement to account for opex associated with one-off factors.

- (f) For the avoidance of doubt the incremental efficiency gains (or losses) are carried over from financial year to financial year in real dollars to ensure that these gains (or losses) are not eroded by inflation. The price indices used in this calculation are to be consistent with those used in the access arrangement.
- (g) Increments or decrements from the summation of incremental efficiency gains or losses calculated in accordance with the approved incentive mechanism in the Access Arrangement Period will give rise to an additional ‘building block’ in the calculation of the Total Revenue amounts for each Financial Year of the subsequent access arrangement period.
- (h) The following costs will be excluded from the operation of the efficiency carryover mechanism:
- i. any cost category that
 - a. is not forecast using a single year revealed cost approach in the access arrangement period following this Access Arrangement Period (intended to commence 1 July 2021); and
 - b. the AER determines, as part of a decision on revisions to apply to this Access Arrangement, to exclude from the operation of the efficiency carryover mechanism because it is satisfied that it would not promote the National Gas Objective.
 - (i) The forecast operating expenditure amount for each year of the Applicable Access Arrangement Period will be adjusted to include any Determined Pass Through Amounts or other AER approved expenditure arising from Cost Pass Through Events which apply in respect of that year
 - (j) Where the AGN changes its approach to classifying costs as either capital expenditure or operating expenditure during the access arrangement period, AGN will adjust the forecast operating expenditure in the access arrangement information so that the forecast expenditures are consistent with the capitalisation policy changes.

- (k) If there is a change in AGN's approach to classifying costs as either capital expenditure or operating expenditure, AGN must provide to the AER a detailed description of the change and a calculation of its impact on forecast and actual operating expenditure.

5.2 Omitted

6. TERMS AND CONDITIONS

6.1 Reference Services

Reference Services will be provided to Network Users under this Access Arrangement on and subject to the terms of an Agreement that will comprise:

- (a) the Specific Terms and Conditions, in the form set out in Annexure F; and
- (b) the terms and conditions set out in Annexure G (**the General Terms and Conditions**).

The Specific Terms and Conditions is a standard form document that contains details which will vary from Network User to Network User and from Agreement to Agreement. The blank spaces in the standard form are to be completed and the document signed by AGN and the Network User to evidence the Agreement between them.

As is apparent from the form of the Specific Terms and Conditions set out in Annexure F, the details to be completed are as follows:

- (a) details of each User Receipt Point at which Gas is to be delivered to AGN by or for the account of that Network User pursuant to the Agreement;
- (b) details of each User DP at which Gas is to be delivered by AGN to or for the account of that Network User pursuant to the Agreement;
- (c) the period for which the Agreement is to remain in force (assuming it is not terminated earlier in accordance with the General Terms and Conditions);
- (d) the date on which AGN is to commence providing Reference Services pursuant to the Agreement;
- (e) where required, details of the maximum Quantity of Gas AGN is obliged to deliver through each User Demand DP to or for the account of the Network User during any Network Day and during any period of 60 minutes; and
- (f) an address for the purposes of the service of notices on the Network User pursuant to the Agreement.

As regards paragraphs (a) and (b), it is possible that a Network User will wish to deliver Gas to AGN through multiple/different Receipt Points that vary over the term of the Agreement or requires AGN to deliver Gas through multiple/different DPs that will vary over the term of the Agreement. In this case, the Specific Terms and Conditions will describe how those Receipt Points and DPs will be determined and identified from time to time over the term of that Agreement. In the case of Network Users who wish to be able to deliver Gas through multiple/different DPs that vary over the time, AGN expects that the User DPs will be defined as those DPs in respect of which the Network User is the current user under the Retail Market Procedures.

As regards paragraph (e), the MDQ for a User DP will be determined by negotiation between AGN and the Network User. If no MDQ has been or is agreed for a User DP, then the MDQ will be determined by AGN acting reasonably, having regard to historical data about the Quantities of Gas delivered through the relevant User DP and any other factors AGN considers relevant.

6.2 Negotiated Services

A Negotiated Service is a Network Service that is different from the Reference Services. If a Network User or a Prospective Network User requires a Network Service on terms and conditions that differ in

any way to the General Terms and Conditions, then the Network User or Prospective Network User requires a Negotiated Service.

The terms and conditions on which AGN will provide a Negotiated Service (including the Tariff for that Negotiated Service) will be determined through negotiation between AGN and the Network User who requires that Negotiated Service, or in default of agreement, through dispute resolution in accordance with Chapter 6 of the National Gas Law.

The terms and conditions on which AGN will provide a Negotiated Service will be the same as the General Terms and Conditions to the extent that the General Terms and Conditions are appropriate and applicable to the Negotiated Service requested by the Network User or Prospective Network User.

Once the terms and conditions of a Negotiated Service have been agreed or determined through dispute resolution in accordance with Chapter 6 of the National Gas Law, AGN and the Network User will sign a document to evidence those terms and conditions.

The document will comprise the Specific Terms and Conditions, the General Terms and Conditions (to the extent that they apply to the Negotiated Service) and a schedule setting out the terms and conditions applicable to that Negotiated Service (as agreed or determined through dispute resolution). The schedule is known as the Special Terms and Conditions and will show how the terms and conditions applicable to the Negotiated Service differ from the General Terms and Conditions.

6.3 Pre-Conditions to Network Services

A Prospective Network User that requires a Network Service must satisfy a number of pre-conditions before AGN is required to provide that Network Service. These pre-conditions are as follows:

- (a) the Network User must satisfy AGN that the Network User meets the requirements of AGN's Credit Policy;
- (b) the Network User must satisfy AGN that the Network User is registered under the Rules as a registered participant in the relevant registrable capacities;
- (c) the Network User must satisfy AGN that the Network User has adequate arrangements in place to ensure that the Network User will comply with its obligations to AGN in relation to the Network Service; and
- (d) the Network User must execute a written agreement setting out or incorporating the terms and conditions on which AGN is to provide the Network User with the Network Service.

6.4 Network User Policy

AGN will not be required to provide Network Services to a Network User, or Prospective Network User, who does not meet the requirements of AGN's Network User Policy. The Network User Policy requires that:

- (a) a Network User must be resident in Australia or have a permanent establishment in Australia;
- (b) (if the Network User is incorporated or constituted under any law other than the Corporations Act 2001) the Network User must have provided AGN with a legal opinion in form and substance satisfactory to AGN that confirms:
 - (i) the due incorporation and good standing of the Network User;
 - (ii) the legal capacity of the Network User to enter into and perform the Agreement between the Network User and AGN; and
 - (iii) the due execution of that Agreement and the enforceability of that Agreement against the Network User;

- (c) the Network User must be capable of being sued in its own name in courts established under the laws of South Australia and other States;
- (d) the Network User must not enjoy any immunity from legal proceedings or legal process (including, but without limitation, any immunity from execution);
- (e) if the Network User is a retailer, the Network User must have an acceptable credit rating in accordance with the law, or provide security in accordance with the law. If the Network User is not a retailer, the Network User must have an acceptable credit rating, or provide AGN with security acceptable to AGN, on terms and conditions acceptable to AGN;
- (f) the Network User must have the necessary financial capability to discharge its present and future obligations in relation to Network Services; and
- (g) the Network User must not be an externally-administered body corporate or insolvent under administration (as defined in the Corporations Act 2001) or under a similar form of administration under any laws applicable to the Network User in any jurisdiction.

For the purposes of paragraph (e), where the Network User is not a retailer, AGN will from time to time determine what constitutes an acceptable credit rating. Until otherwise determined by AGN, an acceptable credit rating is a rating of BBB or higher for long-term unsecured counterparty obligations of the entity, as rated by Standard & Poors (Australia) Pty Ltd.

Whenever AGN decides to alter the acceptable credit rating, it will notify all Network Users that are not retailers of the acceptable credit rating or ratings as altered.

For the purposes of paragraph (e), acceptable security will be

- (a) a bank guarantee, given by an Australian bank acceptable to AGN, for an amount of not less than AGN's reasonable estimate of three months average Charges (calculated by reference to a 12 month period); or
- (b) a guarantee of the Network User's obligations given by an entity, acceptable to AGN, that has an acceptable credit rating (as defined above).

7. CAPACITY TRADING

7.1 Transactions subject to Retail Market Procedures

Transfers of Contracted Capacity will be undertaken:

- (a) where AGN is registered as a participant in a gas market that includes the Network - in accordance with the rules or procedures governing that gas market; or
- (b) if AGN is not so registered - in accordance with rule 105 of the NGR, and this part 7.

As at the date of this Access Arrangement, the Network is the subject of the retail gas market of South Australia and, as the holder of a gas distribution licence under the Gas Act 1997 (SA), AGN is registered as a participant in that market in accordance with sub-rule 135AB(3)(a) of the NGR.

As at the date of this Access Arrangement, the rules or Procedures which govern the South Australian retail gas market are the Retail Market Procedures for South Australia. A copy of the Retail Market Procedures is available at www.aemo.com.au.

7.2 Delivery and Receipt Points

In accordance with rule 106 of the NGR, a Network User may change a Delivery Point and/or Receipt Point.(a) Change of Delivery Points

If a Network User wishes to change Delivery Points, the Network User should refer to the Retail Market Procedures (South Australia), which detail how Network Users become registered as “current users” of Delivery Points. Part 3.3 of the Retail Market Procedures provides details of the procedures which Network Users should follow to transfer Delivery Points and the circumstances in, and grounds on which, AGN may object to a transfer request.

(b) Change of Receipt Points

If a Network User wishes to change Receipt Points, the Network User should submit a written request to AGN, setting out the applicable details. A fee of \$100, payable at the time of the request, will apply to each request. On receipt of the written request and the fee, AGN will complete an analysis to determine whether the request is technically and commercially feasible and reasonable.

8. NETWORK EXTENSIONS AND EXPANSIONS

8.1 High pressure extensions

If AGN proposes a high pressure pipeline extension of the covered pipeline, it must apply to the AER in writing to decide whether the proposed extension will be taken to form part of the covered pipeline and will be covered by this access arrangement.

For the purposes of this section 8, a high pressure pipeline extension means a pipeline that exceeds one kilometre in length and is proposed to be built to a postcode area previously not serviced by reticulated gas.

A notification given by AGN under this clause 8.1 must:

- (a) be in writing;
- (b) state whether AGN intends for the proposed high pressure pipeline extension to be covered by this Access Arrangement;
- (c) describe the proposed high pressure pipeline extension and describe why the proposed Extension is being undertaken; and
- (d) be given to the AER before the proposed high pressure pipeline extension comes into service.

AGN is not required to notify the AER under this clause 8.1 to the extent that the cost of the proposed high pressure pipeline extension has already been included and approved by the AER in the calculation of Reference Tariffs.

After considering AGN’s application, and undertaking such consultation as the AER considers appropriate, the AER will inform AGN of its decision on AGN’s proposed coverage approach for the high pressure pipeline extension.

The AER’s decision referred to above may be made on such reasonable conditions as determined by the AER and will have the effect stated in the decision.

8.2 Treatment of covered pipelines

If an extension or expansion is to be treated as a covered network under the access arrangement, AGN will offer Reference Services for that extension or expansion at Reference Tariffs. AGN may levy

a surcharge on users to recover non-conforming capital expenditure in accordance with Rule 83 of the NGR.

AGN will notify the AER to seek approval of any proposed surcharge to be levied on users of incremental services, and designed to recover non-conforming capital expenditure or a specified portion of non-conforming capital expenditure (non-conforming capital expenditure which is recovered by means of a surcharge will not be rolled into the capital base). Surcharges will only be approved subject to Rule 83(4) of the NGR.

8.3 Other extensions and expansions

Any extensions to and expansions of the capacity of the Network which are not high pressure pipeline extensions within the meaning of clause 8.1 will be treated as part of the Network and covered by this Access Arrangement.

All extensions of low or medium pressure pipelines, and expansions of the capacity of the Network carried out by AGN, will be treated as covered under this Access Arrangement.

9. REVIEW OF THE ACCESS ARRANGEMENT

9.1 Revisions Submission Date

AGN will submit revisions to this Access Arrangement to the Regulator on 1 July 2020.

9.2 Revisions Commencement Date

The revisions to this Access Arrangement referred to in section 9.1 will commence on 1 July 2021.

10. GLOSSARY

In this Access Arrangement and the Access Arrangement Information, unless the contrary intention appears:

- (1) **'Adelaide Region'** means the area shown in Annexure C as the Adelaide Region.
- (1A) **Access Arrangement Information** has the meaning given to it in the National Gas Law and refers to the Access Arrangement Information for the Pipeline, amended to reflect the AER's Final Decision.
- (2) **'AEMO'** means Australian Energy Market Operator Limited (ABN 94 072 010 327).
- (3) **'AER'** or **'Regulatory'** means the Australian Energy Regulator.
- (3A) **AER's Final Decision** means the final decision of the AER under Rule 62 of the National Gas Rules
- (4) **'Agreement'** means the contract between AGN and a Network User for the provision of Network Services.
- (5) **'Ancillary Reference Charge'** means the charge payable by the Network User under the Agreement for an Ancillary Reference Service as calculated in accordance with the Agreement and the Tariff Schedule from time to time.
- (6) **'Ancillary Reference Service'** means a Network Service described in section 2.3 of this Access Arrangement.
- (7) **'Billing Period'** means a calendar month or such other period as AGN and the Network User may agree.
- (8) **'Business Day'** means a day other than a Saturday, Sunday or public holiday in South Australia.
- (9) **'Central Zone'** means the area within the Adelaide Region that is shown in Annexure D as the Central Zone.
- (10) **'Charges'** means the charges payable by the Network User under the Agreement and, in relation to a User DP, means the charges payable by the Network User in relation to that DP as determined in accordance with the Agreement
- (11) **'Claim'** means any claim under or pursuant to an indemnity in the Agreement (or any other contract) or as a result of any breach of the Agreement (or any other contract) or in tort as a result of any negligence or any breach of duty or as a result of any breach of any statutory duty or obligation or any other duty or obligation.
- (12) **'Commercial DP'** has the meaning given to it in section 2.2.3 of this Access Arrangement.
- (13) **'Commercial Haulage Service'** means the Network Service that is described in section 2.2.3 of this Access Arrangement.
- (14) **'Contracted Capacity'** has the same meaning as it has for the purposes of rule 105 of the NGR..
- (15) **'CPI'** means the Consumer Price Index (All Groups Weighted Average for the Eight Capital Cities) as published by the Australian Bureau of Statistics or its successor or, if that Consumer Price Index is not published for any reason, whatever alternative index AGN determines (with the Regulator's approval) from time to time is reasonably equivalent to that Consumer Price Index.
- (16) **'Credit Policy'** means the policy described in section 6.4 of this Access Arrangement.
- (17) **'Cubic Metre'**, in relation to Gas, means the amount of that Gas which, at Standard Conditions, would occupy a volume of one cubic metre.
- (18) **'Customer Connection Contract'** means a "customer connection contract" (as defined in the National Energy Retail Law) between AGN and a Shared Customer in respect of premises at which there is a User DP. A reference to a customer connection contract includes a reference to a customer connection contract taken to be entered into by AGN and a Shared Customer by operation of law.
- (19) **'Customer Connection Services'** means "customer connection services" (as defined in the National

- Energy Retail Law) for premises of a Shared Customer which are the subject of a Customer Connection Contract.
- (20) **'Cycle'**, in relation to a Demand DP, means the period between any two meter readings for that DP which are 30 days, or approximately 30 days, apart and, in relation to a Volume DP, means the period between any two meter readings for that DP which are 90 days, or approximately 90 days, apart.
- (21) **'Delivery Point'** or **'DP'** means a point on the Network at which Gas is, or is to be, delivered out of the Network.
- (22) **'Demand DP'** has the meaning given to it in section 2.2.2 of this Access Arrangement.
- (23) **'Demand Haulage Service'** means the Network Service that is described in section 2.2.2 of this Access Arrangement.
- (24) **'Disconnection'** has the meaning given to it in section 2.3 of this Access Arrangement
- (25) **'Distribution Licence'** means a licence granted to AGN under the *Gas Act 1997 (SA)*, which authorises the operation of the Network or any part of it.
- (26) **'Distribution Services'** in an Agreement means Haulage Reference Services, Ancillary Reference Services, Customer Connection Services and any other services (including any Network Services) provided by AGN to the Network User under or in relation to that Agreement.
- (27) **'Distribution Service Charges'** means the charges payable by the Network User under the Agreement and any other charges that are "distribution service charges" within the meaning of the National Gas Rules (as amended by the National Gas (Retail Support) Amendment Rules 2010).
- (28) **'Domestic DP'** has the meaning given to it in section 2.2.1 of this Access Arrangement.
- (29) **'Domestic Haulage Service'** means the Network Service that is described in section 2.2.1 of this Access Arrangement.
- (30) **'Fourth Access Arrangement Period'** means the period from 1 July 2016 to 30 June 2021.
- (31) **'Gas'** has the meaning given to 'natural gas' in the National Gas Law.
- (32) **'Gas Delivery Zone'** means an area which AGN from time to time defines as a Gas Delivery Zone having regard to whether it is physically possible to deliver Gas from a given User Receipt Point to a given User DP (and, for this purpose, the Gas Delivery Zones as at the date of this Access Arrangement are the areas defined as Gas Delivery Zones on the map set out as Annexure H to this Access Arrangement).
- (33) **'General Terms and Conditions'** has the meaning given to it in section 6.1.
- (34) **'GJ'** means a gigajoule, which is 1000 megajoules.
- (35) **'Gross Heating Value'** means the energy produced by the complete combustion of one Cubic Metre of Gas with air, at Standard Conditions, the product of combustion cooled to a temperature of 15 degrees Celsius and the water vapour formed by the combustion condensed to a liquid state.
- (36) **'GST Act'** means the A New Tax System (Goods and Services Tax) Act 1999.
- (37) **'Haulage Reference Service'** means the Commercial Haulage Service, the Demand Haulage Service or the Domestic Haulage Service.
- (38) **'Haulage Service Charge'** means the charge payable by a Network User under the Agreement for a Haulage Reference Service as calculated in accordance with the Agreement and the Tariff Schedule from time to time.
- (39) **'Heating Value Zone'** means any discrete part of the Network (as defined by AGN) for which a Gross Heating Value has been determined for the purposes of clause 23.2 different from that which applies (for the purposes of that clause) to adjacent parts of the network or other parts of the Network.
- (40) **'Insolvency Event'** means the happening of any of the following events in relation to a party to an

Agreement:

- (a) an order is made that it be wound up or that a 'controller' (as defined in the Corporations Act 2001) be appointed to it or any of its assets;
 - (b) a resolution that it be wound up is passed;
 - (c) a liquidator, provisional liquidator, Controller or any similar official is appointed to, or takes possession or control of, all or any of its assets or undertakings;
 - (d) an administrator is appointed to it or a resolution that an administrator be appointed to it is passed;
 - (e) it enters into, or resolves to enter into, an arrangement, compromise or composition with any of, or any class of, its creditors or shareholders, or an assignment for the benefit of any of, or any class of, its creditors, in relation to a potential Insolvency Event in subparagraphs (a) to (d), or (f) to (g) occurring;
 - (f) any action is taken by the Australian Securities and Investment Commission to cancel its registration or to dissolve it;
 - (g) it is insolvent within the meaning of Section 95A of the Corporations Act, as disclosed in its accounts or otherwise, states that it is unable to pay its debts or it is presumed to be insolvent under any applicable law; or
 - (h) it stops or suspends:
 - the payment of all or a class of its debts; or
 - the conduct of all or a substantial part of its business; or
 - (i) any other event happens under any law (including the laws of another jurisdiction) that has the same effect, or a substantially similar effect, as any of the events specified in the preceding paragraphs.
- (41) **'Interest Rate'** means the Commonwealth Bank of Australia corporate overdraft reference rate, as varied from time to time.
- (42) **'Maximum Daily Quantity'** or **'MDQ'**, in relation to a DP, means the maximum Quantity of Gas which AGN agrees to deliver through that DP to or for the account of a Network User during any Network Day, as specified in, or determined in accordance with, the Specific Terms and Conditions and the General Terms and Conditions, or any other agreement.
- (43) **'Maximum Hourly Quantity'** or **'MHQ'**, in relation to a DP, means the maximum Quantity of gas (in GJ) which AGN is obliged to transport and deliver to a particular Delivery Point on behalf of the User in any Hour (excluding Overruns).
- (44) **'Metering Installation'**, in relation to a User DP, means the meter and associated equipment and installations (which may include correctors, regulators, filters, data loggers and telemetry relating to a DP) owned or operated by AGN at that User DP and, in relation to a User Receipt Point, means the metering installation owned or operated by AGN at that User Receipt Point or, if AGN does not own or operate metering installation at that User Receipt Point, the metering installation provided by or on behalf of the Network User at that Receipt Point.
- (45) **'Metering Year'**, in relation to a DP, means the period between any two meter readings at that DP which are 12 months, or approximately 12 months, apart.
- (46) **'Negotiated Service'** means a Network Service of the type described in section 2.4 of this Access Arrangement.
- (47) **'NERL'** means the National Energy Retail Law.
- (48) **'NERR'** means the National Energy Retail Rules.
- (49) **'Network'** means the distribution mains that are the subject of this Access Arrangement from time to time, together with inlets, regulators, Metering Installations, pipes and all ancillary equipment.
- (50) **'Network Day'** means a period of 24 consecutive hours that commences at 6:00am Central Standard

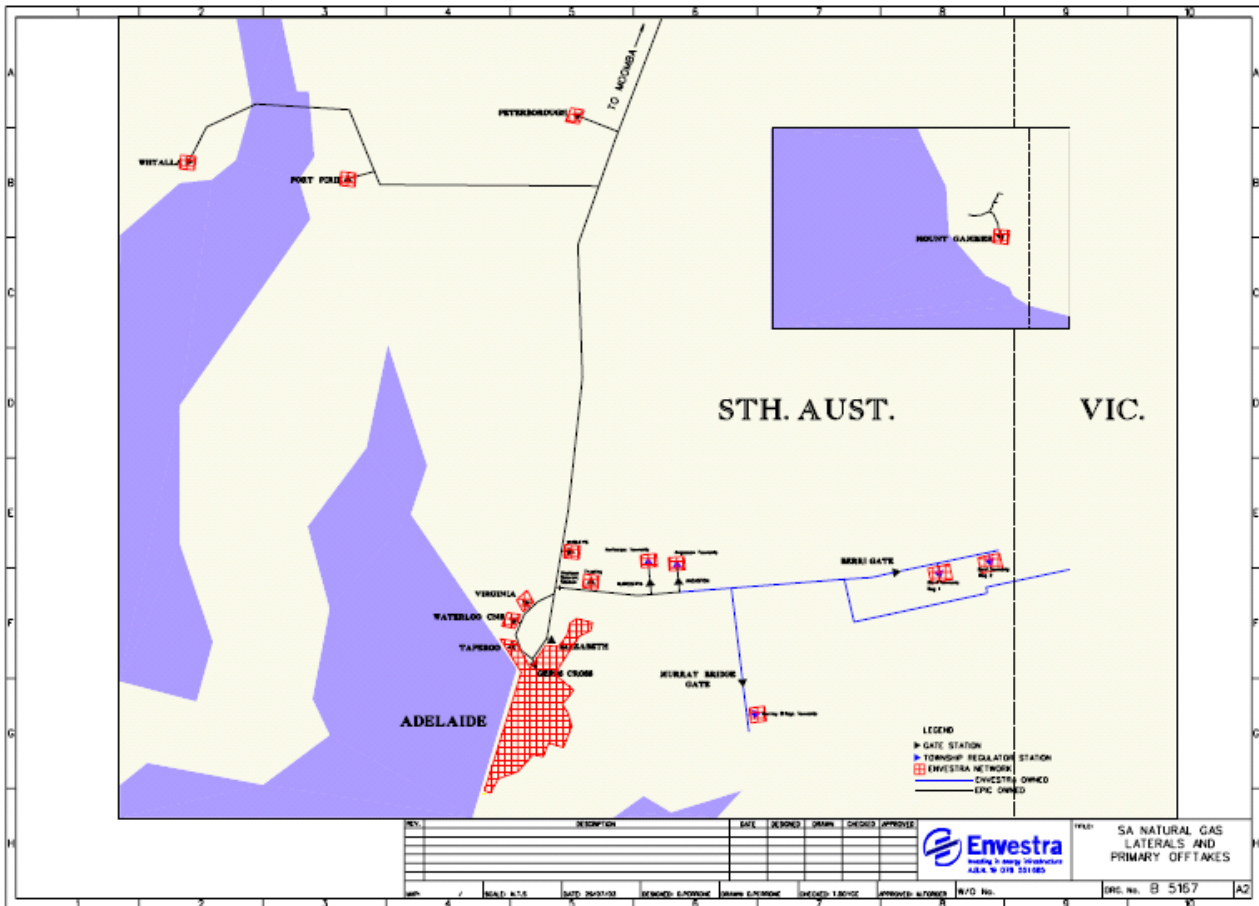
Time.

- (51) **'Network Service'** means a Service provided by means of the Network.
- (52) **'Network User'** (in an Agreement) means the User that is a party to that Agreement.
- (53) **'Northern Zone'** means the area within the Adelaide Region that is shown in Annexure D as the Northern Zone.
- (54) **'Overrun Rate'** in relation to a given Network Day, means the amount specified as the Overrun Rate in the Tariff Schedule applicable on that Network Day.
- (55) **'Peterborough Region'** means the area shown in Annexure C as the Peterborough Region.
- (56) **'Planned Interruption'** means an interruption of the supply of Gas to the Network for:
- i. the planned maintenance, repair or augmentation of the Network, including planned or routine maintenance of metering equipment; or
 - ii. the installation of a new connection or a connection alteration.
- (57) **'Port Pirie Region'** means the area shown in Annexure C as the Port Pirie Region.
- (58) **'Prospective Network User'** means a person who seeks or who is reasonably likely to seek to enter into a contract for a Network Service and includes a Network User who seeks or may seek to enter into a contract for an additional Network Service.
- (59) **'Quantity of Gas'** means the quantity of Gas determined in accordance with the Agreement.
- (60) **'Receipt Point'** means a point on the Network at which Gas is, or is to be, received into the Network.
- (61) **'Reconnection'**, has the meaning given to it in section 2.3 of this Access Arrangement.
- (62) **'Reference Service'** means a Haulage Reference Service or an Ancillary Reference Service.
- (63) **'Reference Tariff'** means the tariff that corresponds to a Haulage Reference Service or an Ancillary Reference Service.
- (64) **'Region'** means the Adelaide Region, the Peterborough Region, the Port Pirie Region, the Riverland Region, the South East Region, the Whyalla Region or the Tanunda Region.
- (65) **'Regulator'** see 'AER'.
- (66) **'Related Haulage Agreement'** (in an Agreement between AGN and a Network User) means any other agreement between AGN and that Network User under which AGN delivers, or is to deliver, Gas to or for the account of that Network User.
- (67) **'Relevant Tax'** means any royalty, duty, excise, tax, impost, levy, fee or charge (including, but without limitation, any goods and services tax) imposed by the Commonwealth of Australia, any State or Territory of Australia, any local government or statutory authority or any other body (authorised by law to impose such an impost, tax or charge) on or in respect of the Network (or any part of it) or on or in respect of the operation, repair, maintenance, administration or management of the Network (or any part of it) or on or in respect of the provision of any Network Service (other than:
- (a) income tax and capital gains tax;
 - (b) stamp duty, financial institutions duty and bank accounts debits tax;
 - (c) penalties, charges, fees and interest on late payments, or deficiencies in payments, relating to any tax; or
 - (d) any tax that replaces or is the equivalent of or similar to any of the taxes referred to in paragraphs (a) or (b) (including any State equivalent tax).
- (68) **'Retail Market Procedures'** means the retail market procedures made by the Australian Energy Market Operator from time to time under section 91M of the National Gas Law and which apply to the Network.
- (69) **'Riverland Region'** means the area shown in Annexure C as the Riverland Region.

- (70) **'Rules'** means the National Gas Rules under the National Gas Law.
- (71) **'Second Access Arrangement Period'** means the period from 1 July 2006 to 30 June 2011.
- (72) **'Shared Customer'** means any person from time to time who has, or has had, a contract or other arrangement with a User to purchase Gas through a User DP and any person from time to time who is or has been liable to pay for that Gas under the NERL. In this definition, a reference to a contract or other arrangement with a User includes a reference to a deemed contract or arrangement that came into operation, or comes into operation, under the NERL.
- (73) **'South East Region'** means the area shown in Annexure C as the South East Region.
- (74) **'Southern Zone'** means the area within the Adelaide Region that is shown in Annexure D as the Southern Zone.
- (75) **'Specific Terms and Conditions'** means the specific terms and conditions as described in section 6.1 (and, in relation to an Agreement between AGN and a Network User, means the Specific Terms and Conditions which form part of that Agreement).
- (76) **'Standard Conditions'** means a temperature of 15 degrees Celsius and an absolute pressure of 101.325 kilopascals.
- (77) **'Start Date'**, in relation to an Agreement, means the date on which AGN commences, or is to commence, providing Network Services to a Network User pursuant to that Agreement as specified in, or determined in accordance with, the Specific Terms and Conditions.
- (78) **'Sub-Network'** means any part of the Network that is physically discrete from the remainder of the Network (in the sense that, having regard to the physical configuration of the Network and the flow of Gas within the Network, it is physically impossible to transport Gas delivered at a User Receipt Point on that part of the Network to DPs on the remainder of the Network).
- (79) **'Tanunda Region'** means the area within the boundary of postcode 5352.
- (80) **'Tariff C'** means the tariff for the Commercial Haulage Service.
- (81) **'Tariff D'** means the tariff for the Demand Haulage Service.
- (82) **'Tariff R'** means the tariff for the Domestic Haulage Service.
- (83) **'Tariff Schedule'** means the tariff schedule contained in Annexure B to this Access Arrangement or, if AGN has published a revised tariff schedule, the tariff schedule in effect from time to time.
- (84) **'Technical Regulator'** has the meaning given to it in the *Gas Act 1997 (SA)*.
- (85) **'Term'**, in relation to an Agreement, means the period on and from the Start Date of that Agreement up to, and including, the date on which the Agreement terminates in accordance with its terms.
- (86) **'Third Access Arrangement Period'** means the period from 1 July 2011 to 30 June 2016.
- (87) **'TJ'** means a terajoule, which is 1000 gigajoules.
- (88) **'Unaccounted for Gas'** or **'UAFG'** means the difference between the Quantity of Gas received into the Network and delivered out of the Network, over a specified period of time.
- (89) **'Upstream Operator'** means the operator of a transmission pipeline, a distribution network or another facility through which Gas is delivered to any Receipt Point.
- (90) **'Unplanned Interruption'** means an interruption of the supply of Gas to the Network to carry out unanticipated or unplanned maintenance or repairs in any case where there is an actual or apprehended threat to the safety, reliability or security of the supply of Gas through the Network, and includes:
- a. an interruption in circumstances where, in the opinion of AGN, a Customer's installation or the Network poses an immediate threat of injury or material damage to any person, any property or the Network; or
 - b. an interruption in circumstances where:

- i. there are health or safety reasons warranting an interruption; or
 - ii. an emergency warranting an interruption; or
 - iii. AGN is required to interrupt supply at the direction of a relevant authority; or
- c. an interruption to shed demand for Gas because the total demand for Gas at the relevant time exceeds the total supply available; or
- d. an interruption to restore supply to a Customer.
- (91) **'User'** means a person who has a current contract for a Network Service or where there has been an arbitration, has an entitlement to a Network Service.
- (92) **'User DP'**, in relation to an Agreement, means each DP identified as a User DP in or by reference to the Specific Terms and Conditions which form part of that Agreement.
- (93) **'User Receipt Point'**, in relation to a Network User, means each Receipt Point identified as a User Receipt Point in or by reference to the Specific Terms and Conditions which form part of that Agreement.
- (94) **'Volume DP'** means a Commercial DP or a Domestic DP.
- (95) **'Volume of Gas'** means volume in Cubic Metres.
- (96) **'Whyalla Region'** means the area shown in Annexure C as the Whyalla Region.
- (97) **'Year'** means any period of 12 consecutive months.
- (98) **'Zone'** means the Central Zone, the Northern Zone or the Southern Zone.

ANNEXURE A AGN SA Gas Distribution Network



ANNEXURE B

Tariff Schedule - 2016/17

Table 1: Tariff R (Domestic Haulage Reference Service) – all areas excluding Tanunda

Daily Charges (exc GST)	
Base Charge (\$/day)	0.2980
Charge for the first 0.0274 GJ of Gas delivered (\$/GJ)	24.0479
Charge for the next 0.0219 GJ of Gas delivered (\$/GJ)	11.6083
Charge for additional Gas delivered (\$/GJ)	3.9296

Table 2: Tariff R (Domestic Haulage Reference Service) – Tanunda

Daily Charges (exc GST)	
Base Charge (\$/day)	0.2980
Charge for the first 0.0274 GJ of Gas delivered (\$/GJ)	31.2623
Charge for the next 0.0219 GJ of Gas delivered (\$/GJ)	15.0908
Charge for additional Gas delivered (\$/GJ)	5.1085

Notes:

- 1. The total daily Charge will comprise the Base Charge plus a Charge for the Quantity of Gas delivered (or estimated to have been delivered) through the Domestic Delivery Point.*
- 2. The Charge for the Quantity of Gas delivered (or estimated to have been delivered) through the Domestic Delivery Point will be calculated at the rates shown in the table.*
- 3. A reference in the table to the Gas delivered through the Domestic Delivery Point is a reference to Gas delivered through the Domestic Delivery Point whether for the account of the Network User or for the account of any other person or persons.*
- 4. Charges will be calculated to four decimal places.*

Table 3: Tariff C (Commercial Haulage Reference Service) – all areas excluding Tanunda

Daily Charges (exc GST)	
Base Charge (\$/day)	0.6275
Charge for the first 0.9863 GJ of Gas delivered (\$/GJ)	11.9691
Charge for the next 4.2740 GJ of Gas delivered (\$/GJ)	6.4238
Charge for the next 11.1780 GJ of Gas delivered (\$/GJ)	2.7530
Charge for additional Gas delivered (\$/GJ)	1.4902

Table 4: Tariff C (Commercial Haulage Reference Service) – Tanunda

Daily Charges (exc GST)	
Base Charge (\$/day)	0.6275
Charge for the first 0.9863 GJ of Gas delivered (\$/GJ)	15.5598
Charge for the next 4.2740 GJ of Gas delivered (\$/GJ)	8.3509
Charge for the next 11.1780 GJ of Gas delivered (\$/GJ)	3.5789
Charge for additional Gas delivered (\$/GJ)	1.9373

Notes:

1. *The total daily Charge will comprise the Base Charge plus a Charge for the Quantity of Gas delivered (or estimated to have been delivered) through the Commercial Delivery Point.*
2. *The Charge for the Quantity of Gas delivered (or estimated to have been delivered) through the Commercial Delivery Point will be calculated at the rates shown in the table.*
3. *A reference to the Gas delivered through the Commercial Delivery Point is a reference to Gas delivered through the Commercial Delivery Point whether for the account of the Network User or for the account of any other person or persons.*
4. *Charges will be calculated to four decimal places.*

Table 5 - Tariff D (Demand Haulage Reference Service - Adelaide Region)

MDQ at Delivery Point	Monthly Charge (exc GST)		
	Northern Zone	Central Zone	Southern Zone
50GJ or less	2,307.3235	2,307.3235	2,307.3235
Next 50GJ \$/GJ of MDQ for MDQ over 50GJ	44.8644	53.2804	62.8336
Next 900GJ \$/GJ of MDQ for MDQ over 100GJ	28.0089	33.8836	39.3504
Additional GJ \$/GJ of MDQ for MDQ over 1000GJ	8.4866	9.7102	11.8671

Table 6 – Tariff D (Demand Haulage Reference Service - Other Regions)

MDQ at Delivery Point	Monthly Charge (exc GST)				
	Port Pirie Region	Riverland Region	South East Region	Peterborough Region	Whyalla Region
50GJ or less	2,307.3235	3,256.8422	2,307.3235	3,256.8422	2,307.3235
Next 50GJ \$/GJ of MDQ for MDQ over 50GJ	44.8644	65.5083	44.8644	65.5083	44.8644
Next 900GJ \$/GJ of MDQ for MDQ over 100GJ	15.5483	40.8198	23.1564	40.8198	23.1564
Additional GJ \$/GJ of MDQ for MDQ over 1000GJ	7.8120	8.4866	8.4866	8.4866	8.4866

Notes:

1. *The Charges shown in Tables 3 and 4 are charges for a complete calendar month.*
2. *The Charge for a calendar month will accrue from day to day in equal portions.*
3. *Charges will be calculated to four decimal places.*
4. *For the purpose of calculating daily overrun charges pursuant to clause 5 of the General Terms and Conditions, the overrun rate is \$15 per GJ (excl GST).*

Table 7 – Ancillary Reference Tariffs (exc GST)

Ancillary Reference Service	Tariff
Special Meter Read	10.20
Disconnection	71.00
Reconnection	71.00
Meter Removal	71.00
Meter Reinstallation	77.00
Meter Gas and Installation test	210.00

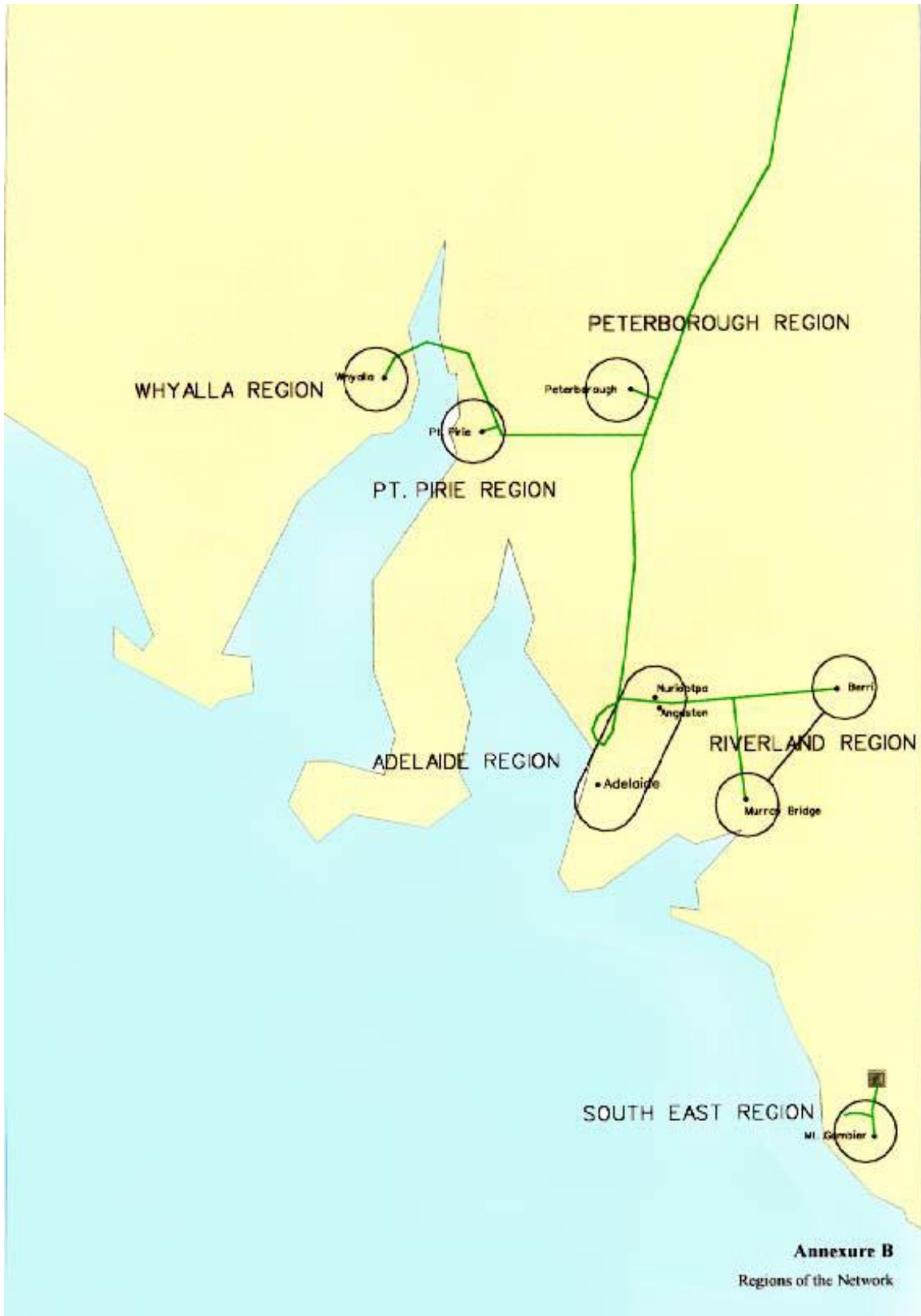
Note:

Where the Reference Tariff for an Ancillary Reference Service (as varied) is less than \$20, the Reference Tariff (as varied) will be rounded to the nearest 10 cents (with five cents rounded upwards). Where the Reference Tariff for an Ancillary Reference Service (as varied) is \$20 or more, the Reference Tariff (as varied) will be rounded to the nearest dollar (with 50 cents rounded upwards).

ANNEXURE C

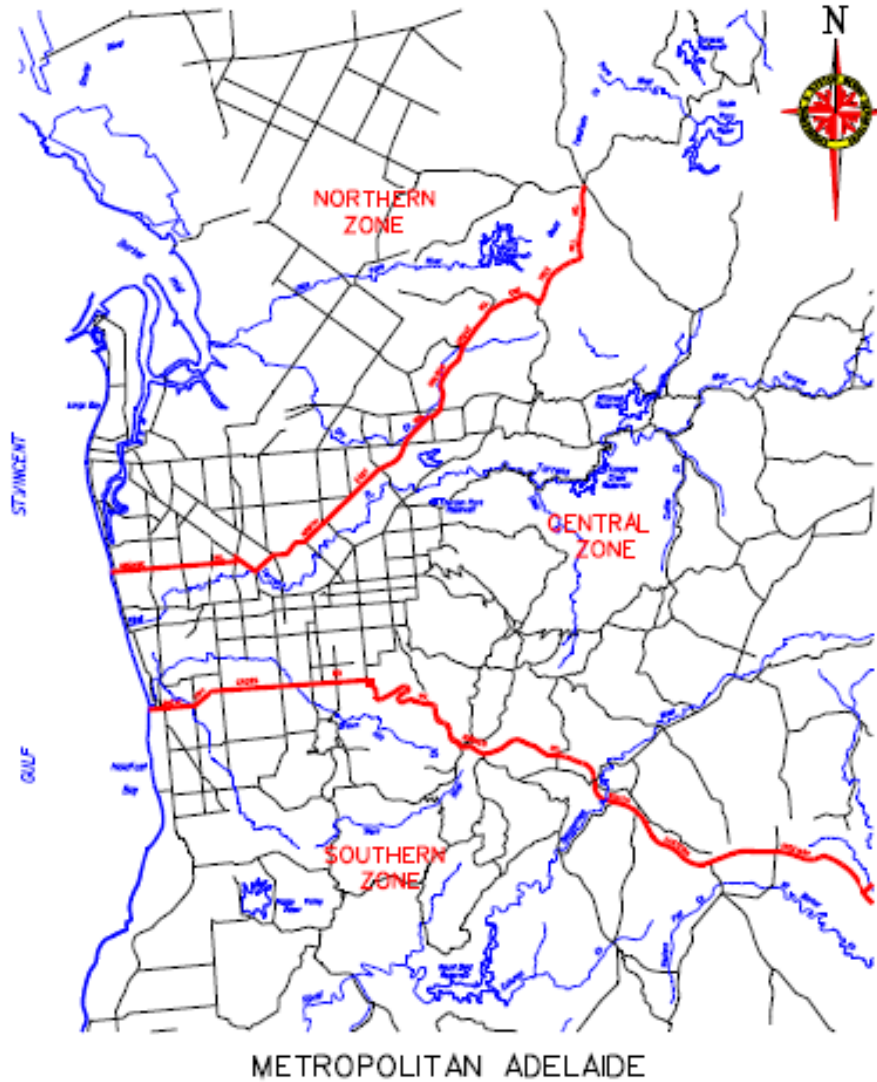
Map showing Regions* of the Network

(*excluding Tanunda Region)



ANNEXURE D

Map showing Tariff Zones within the Adelaide Region



ANNEXURE E

Reference Tariff Control Formulae

Any proposed variations to the Haulage Reference Tariffs pursuant to section 4.1 of this Access Arrangement must comply with the formulae set out in this Annexure.

BOX 1: TARIFF CONTROL FORMULA

$$(1 + CPI_t)(1 - X_t)(1 + U_t)(1 + PT_t) \geq \frac{\sum_{i=1}^n \sum_{j=1}^m p_t^{ij} q_{t-2}^{ij}}{\sum_{i=1}^n \sum_{j=1}^m p_{t-1}^{ij} q_{t-2}^{ij}} \quad i=1, \dots, n.$$

where:

CPI_t is the annual percentage change in the ABS CPI All Groups, Weighted Average of Eight Capital Cities from the December quarter in year t-2 to the December quarter in year t-1, calculated using the following method:

The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the December quarter in financial year t-1
divided by
The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the December quarter in financial year t-2
minus one.

t is the financial year for which tariffs are being set.

X_t is the X factor for each financial year of the 2016–21 access arrangement period as determined in the PTRM as approved in the AER's final decision, and annually revised for the return on debt update calculated for the relevant financial year during the access arrangement period in accordance with Box 3

U_t is the adjustment factor to accommodate unaccounted for gas price variations as outlined In Box 4

PT_t is the cost pass through factor as outlined Box 5

n is the number of different reference tariffs

m is the different components, elements or variables ("components") comprised within a reference tariff

p_t^{ij} is the proposed component j of reference tariff i in year t

p_{t-1}^{ij} is the prevailing component j of reference tariff i in year t-1

q_{t-2}^{ij} is the audited quantity of component j of reference tariff i that was sold in year t-2 (expressed in the units in which that component is expressed (e.g. GJ)).

BOX 2: REBALANCING CONTROL FORMULA

The following formula applies to each tariff class separately

$$(1 + CPI_t)(1 - X_t)(1 + U_t)(1 + PT_t)(1 + 0.02) \geq \frac{\sum_{i=1}^n \sum_{j=1}^m P_t^{ij} Q_{t-2}^{ij}}{\sum_{i=1}^n \sum_{j=1}^m P_{t-1}^{ij} Q_{t-2}^{ij}}$$

where:

CPI_t is the annual percentage change in the ABS CPI All Groups, Weighted Average of Eight Capital Cities from the December quarter in year t-2 to the December quarter in year t-1, calculated using the following method:

The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the December quarter in financial year t-1

divided by

The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the December quarter in financial year t-2

minus one.

t is the financial year for which tariffs are being set.

X_t is the X factor for each financial year of the 2016–21 access arrangement period as determined in the PTRM as approved in the AER's final decision, and annually revised for the return on debt update calculated for the relevant financial year during the access arrangement period in accordance with Box 3

U_t is the adjustment factor to accommodate unaccounted for gas price variations as outlined In Box 4

PT_t is the cost pass through factor as outlined Box 5

n is the number of different reference tariffs in each tariff class

m is the different components, elements or variables ("components") comprised within a reference tariff

P_t^{ij} is the proposed component j of reference tariff i in year t

P_{t-1}^{ij} is the prevailing component j of reference tariff i in year t-1

Q_{t-2}^{ij} is the audited quantity of component j of reference tariff i that was sold in year t-2 (expressed in the units in which that component is expressed (e.g. GJ)).

BOX 3: ANNUAL UPDATE OF RETURN ON DEBT FORMULA

The annual update of the return on debt component of the rate of return in each regulatory year, starting from 1 July 2017, of the access arrangement period is to be calculated as follows:

For financial year 2016-17:	$kd_{2016-17} = R_{2016-17}$
For financial year 2017-18:	$kd_{2017-18} = (0.9 \times R_{2016-17}) + (0.1 \times R_{2017-18})$
For financial year 2018-19:	$kd_{2018-19} = (0.8 \times R_{2016-17}) + (0.1 \times R_{2017-18}) + (0.1 \times R_{2018-19})$
For financial year 2019-20:	$kd_{2019-20} = (0.7 \times R_{2016-17}) + (0.1 \times R_{2017-18}) + (0.1 \times R_{2018-19}) + (0.1 \times R_{2019-20})$
For financial year 2020-21:	$kd_{2020-21} = (0.6 \times R_{2016-17}) + (0.1 \times R_{2017-18}) + (0.1 \times R_{2018-19}) + (0.1 \times R_{2019-20}) + (0.1 \times R_{2020-21})$

Where:

kd_t is the annual return on debt for financial year t of this Access Arrangement Period;

and

R_t is the annual return on debt observation for each financial year t of this Access Arrangement Period (other than financial year 2016-17) calculated in accordance with steps 1 to 17 below. For financial year 2016-17, $R_{2015-16} = 5.51$ per cent.

Calculation of the annual return on debt observation

The return on debt observation for each financial year will be calculated by automatic application of the following formula. This requires three stages:

- calculation of the adjusted RBA estimate;
- calculation of the adjusted BVAL estimate;
- calculation of the final estimate—where the AER combines its implementations of the RBA estimate and the BVAL estimate;

These formula steps relate to the approach specified in the AER's Final Decision. In the event that data availability changes during the access arrangement period, the formulas below will change to reflect the contingencies set out in appendix J of the AER's Final Decision.

Calculation of the adjusted RBA estimate

To calculate the adjusted RBA estimate:

- Download RBA table F3—'Aggregate measures of Australian corporate bond yields' from the RBA website.
- From this file, download the 7 and 10 year 'Non-financial corporate BBB-rated bonds—Yield' entries for dates:
 - from the most recent published RBA date prior to the commencement of the nominated averaging period for debt
 - to the first published RBA date following the conclusion of the nominated averaging period for debt

(c) all published dates between a. and b.
(3) Download, from RBA table F16—'Indicative Mid Rates of Australian Government Securities - 2013 to Current', daily yields on CGSs for dates within the Service Provider's averaging period.

(4) Linearly interpolate between the two nearest bonds straddling 7 years remaining term to maturity, and the two nearest CGS bonds straddling 10 years remaining term to maturity. This should be done using the following formula:

$$\text{yield}_{\text{interpolated}} = \text{yield}_{\text{lower straddle bond}} + (\text{yield}_{\text{upper straddle bond}} - \text{yield}_{\text{lower straddle bond}}) * (\text{date}_{10 \text{ years from interpolation date}} - \text{maturity date}_{\text{lower straddle bond}}) / (\text{maturity date}_{\text{upper straddle bond}} - \text{maturity date}_{\text{lower straddle bond}}).$$

(5) Linearly extrapolate the published RBA 10 year yield (from step 2) from its published effective term to an effective term of 10 years using the formula below:

$$\text{yield}_{10} = \text{yield}_{10 \text{ year published}} + [(\text{spread-to-swap}_{10 \text{ year published}} - \text{spread-to-swap}_{7 \text{ year published}}) / (\text{effective term}_{10 \text{ year published}} - \text{effective term}_{7 \text{ year published}})] * (10 - \text{effective term}_{10 \text{ year published}}).$$

(6) Linearly extrapolate the published RBA 7 year yield (from step 2) from its published effective term to an effective term of 7 years using the formula below:

$$\text{yield}_7 = \text{yield}_{7 \text{ year published}} + [(\text{spread-to-swap}_{10 \text{ year published}} - \text{spread-to-swap}_{7 \text{ year published}}) / (\text{effective term}_{10 \text{ year published}} - \text{effective term}_{7 \text{ year published}})] * (7 - \text{effective term}_{7 \text{ year published}}).$$

(7) Subtract from the extrapolated 10 year RBA yield on each publication date the interpolated CGS yield on that date. For the 10 year term, use the RBA series as adjusted in step 5. These are the adjusted RBA 10 year spreads.

(8) Obtain daily RBA spread estimates by linear interpolation of the adjusted RBA spreads (from steps 5 and 6) for both 7 and 10 year terms between the published dates identified in step 2. Use the adjusted RBA spread estimates as calculated in step 6. This should be done using the following formula:

$$\text{spread}_{\text{interpolated}} = \text{spread}_{\text{first straddling publication date}} + (\text{date}_{\text{interpolation}} - \text{date}_{\text{first straddling publication date}}) * (\text{spread}_{\text{second straddling publication date}} - \text{spread}_{\text{first straddling publication date}}) / (\text{date}_{\text{second straddling publication date}} - \text{date}_{\text{first straddling publication date}})$$

Note: If the annual return on debt estimate must be finalised before a final published RBA month-end estimate is available, hold the last observed RBA spread constant to the end of the averaging period.

(9) Add to these daily spreads (from step 8), daily interpolated estimates of the CGS (from step 4) for all business days in the service providers averaging period. Specifically:

(a) add the 7 year interpolated CGS estimates to the 7 year interpolated RBA spreads. These are the interpolated RBA daily 7-year yield estimates.

(b) add the 10 year interpolated CGS estimate to the 10 year interpolated RBA spread. These are the interpolated RBA daily 10-year yield estimates.

(10) Convert the interpolated daily yield estimates (from step 9) to effective annual rates, using the formula:

$$\text{effective annual rate} = ((1 + \text{yield} / 200)^2 - 1) * 100$$

(11) Average the yield estimate for the 10 year RBA yield estimate over all business days in the service provider's averaging period. This is our adjusted RBA estimate.

Calculation of the adjusted BVAL estimate

To calculate the adjusted BVAL estimate:

- (12) For dates after 14 April 2015, download the 10 year Corporate BBB rated Australian BVAL curve (BVCSAB10). For dates before 14 April 2015, download from Bloomberg the 7 year Corporate BBB rated Australian BVAL curve (BVCSAB07 index) for all business days in the service provider's averaging period.
- (13) For dates before 14 April 2015, add to the 7 year yield the difference between the 7 and 10 year daily RBA adjusted yields (as calculated in step 8) of the RBA process). This is the extrapolated daily estimate of the BVAL 10 year yield.
- (14) For all dates, convert the 10 year yields into effective annual rates, using the formula:
effective annual rate = $((1 + \text{yield} / 200)^2 - 1) * 100$
- (15) Average the extrapolated daily estimates of the BVAL 10 year yield over all business days in the service provider's averaging period. This is our adjusted BVAL estimate.

Final estimate

- (16) Take the simple average of the adjusted RBA estimate (from step 11 in the RBA data section) and the adjusted BVAL estimate (from step 15 in the BVAL data section). This is the annual estimate of the return on debt.
- (17) A business day means a day other than a Saturday, Sunday or a day recognised as a national public holiday or a public holiday in NSW.

Annual return on debt observation where relevant data not available

For any financial year of this Access Arrangement Period, with the exception of the financial year 2016-17, for which an annual return on debt observation cannot be calculated in accordance the formula above, due to changes in data availability, adjust the approach in accordance with the contingencies set out in appendix J of the AER's final decision for AGN.

Averaging periods

The averaging periods specified in confidential appendix L of attachment 3 of the AER's Final Decision must be used for the purposes of calculating the annual return on debt observation for each financial year of this Access Arrangement Period.

Notification and AER determination of the annual return on debt observation

In the 'PTRM input' sheet of AGN's final decision PTRM, update the relevant cell to reflect the updated return on debt estimate (kdt). This is:

- | | | | |
|-----|------------------|------|-------|
| (a) | $Kd_{2016-17}$: | Cell | G222 |
| (b) | $Kd_{2017-18}$: | Cell | H222 |
| (c) | $Kd_{2018-19}$: | Cell | I222 |
| (d) | $Kd_{2018-19}$: | Cell | J222 |
| (e) | $Kd_{2020-21}$: | Cell | K222. |

On the 'X factors' sheet of the final decision PTRM, update the relevant X factor as follows:

- | | | |
|-----|------------------|----------------------|
| (a) | $Kd_{2016-17}$: | 'Set X2 (price cap)' |
|-----|------------------|----------------------|

- (b) $Kd_{2017-18}$: 'Set X3 (price cap)'
- (c) $Kd_{2018-19}$: 'Set X4 (price cap)'
- (d) $Kd_{2018-19}$: 'Set X5 (price cap)'

The AER will notify AGN of the updated Return on Debt and X factor within 15 business days after the end of AGN's averaging period.

BOX 4: UNACCOUNTED FOR GAS PRICE VARIATION FORMULA

The following formula adjusts for price variations in unaccounted for gas

$$U_t = \frac{(1 + U'_t)}{(1 + U'_{t-1})} - 1$$

where:

U'_{t-1} is:

- (a) zero when financial year t-1 refers to financial year 2016–17
- (b) the value of U'_t determined in the financial year t-1 for all other financial years in the access arrangement period

$$U'_t = \frac{DP_{t-2} \times (1 + \text{realWACC}_t) \times (1 + \text{realWACC}_{t-1}) \times (1 + CPI_{t-1})}{(1 - X_t) \sum_{i=1}^n \sum_{j=1}^m p_{t-1}^{ij} q_{t-2}^{ij}}$$

where:

t is the financial year for which tariffs are being set.

DP_{t-2} is the difference between the actual unaccounted for gas price and the forecast unaccounted for gas price calculated as:

$$DP_{t-2} = (UP_{t-2} \times FQ_{t-2}) - (FP_{t-2} \times FQ_{t-2})$$

where:

UP_{t-2} is the actual price for unaccounted for gas as calculated as the sum of retail gas prices for wholesale, maximum daily quantity (MDQ) and transmission gas in financial year t-2

FP_{t-2} is the price used to forecast the unaccounted for gas (UAFG) allowance in financial year t-2 and is as set out below

	Forecast Price for UAFG (\$/GJ)(\$2014/15)
2016/17	11.10
2017/18	11.10
2018/19	11.10
2019/20	11.10
2020/21	11.10

CPI_t is the annual percentage change in the ABS CPI All Groups, Weighted Average of Eight Capital Cities from the December quarter in year t-2 to the December quarter in year t-1, calculated using the following method:

- The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the December quarter in financial year t-1
- divided by
- The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the December quarter in financial year t-2

year t-2
minus one.

CPI_{t-1} is the value of CPI_t determined in financial year t-1

$realWACC_t$ is the real vanilla weighted average cost of capital as set out in this final decision and updated annually within the PTRM

$realWACC_{t-1}$ is the real vanilla weighted average cost of capital as determined in financial year t-1

X_t is the X factor for each financial year of the 2016–21 access arrangement period as determined in the PTRM as approved in the AER's final decision, and annually revised for the return on debt update calculated for the relevant financial year during the access arrangement period in accordance with Box 3

n is the number of different reference tariffs

m is the different components, elements or variables ("components") comprised within a reference tariff

p_{t-1}^{ij} is the prevailing component j of reference tariff i in year t-1

q_{t-2}^{ij} is the audited quantity of component j of reference tariff i that was sold in year t-2 (expressed in the units in which that component is expressed (e.g. GJ)).

BOX 5: PASS THOROUGH ADJUSTMENT FACTOR FORMULA

The following formula adjusts for approved cost pass through events

$$PT_t = \frac{(1 + PT'_t)}{(1 + PT'_{t-1})} - 1$$

where:

PT'_{t-1} is:

- (a) zero when financial year t-1 refers to financial year 2016–17
- (b) the value of PT'_t determined in the financial year t-1 for all other financial years in the access arrangement period

and

$$PT'_t = \frac{AP_t}{(1 + CPI_t)(1 - X_t)(1 + U_t) \sum_{i=1}^n \sum_{j=1}^m p_{t-1}^{ij} q_{t-2}^{ij}}$$

where

AP_t is:

- (a) any determined pass through amount that the AER approves in whole or part in financial year t ; and/or
- (b) any pass through amounts arising from pass through events (as that term is defined in the access arrangement applying to AGN in the immediately prior access arrangement period) occurring in the 2011–16 access arrangement period that AGN proposed to pass through in whole or in part in financial year t ,

that includes an amount to reflect the time value of money between incurring the costs and recovering the costs, and excludes any amounts already passed through in reference tariffs.

CPI_t is the annual percentage change in the ABS CPI All Groups, Weighted Average of Eight Capital Cities from the December quarter in year $t-2$ to the December quarter in year $t-1$, calculated using the following method:

The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the December quarter in financial year $t-1$
divided by
The ABS CPI All Groups, Weighted Average of Eight Capital Cities for the December quarter in financial year $t-2$
minus one.

t is the financial year for which tariffs are being set.

X_t is the X factor for each financial year of the 2016–21 access arrangement period as determined in the PTRM as approved in the AER's final decision, and annually revised for the return on debt update calculated for the relevant financial year during the access arrangement period in accordance with Box 3

U_t is the adjustment factor to accommodate unaccounted for gas price variations as outlined in Box 4

PT_t is the cost pass through factor as outlined Box 5

n is the number of different reference tariffs

m is the different components, elements or variables ("components") comprised within a reference tariff

p_t^{ij} is the proposed component j of reference tariff i in year t

p_{t-1}^{ij} is the prevailing component j of reference tariff i in year $t-1$

q_{t-2}^{ij} is the audited quantity of component j of reference tariff i that was sold in year $t-2$ (expressed in the units in which that component is expressed (e.g. GJ)).

ANNEXURE F

Specific Terms and Conditions

Network User ¹
User Receipt Points The Receipt Points identified in, or identified in accordance with, Schedule 1 to these Specific Terms and Conditions (as that Schedule may be amended from time to time by agreement in writing between the Network User and AGN).
User Delivery Points [Each Delivery Point in respect of which the Network User is the current user (as defined in the Retail Market Procedures) from time to time.] ²
Start Date
Term [Commencing on the Start Date and ending on a date to be agreed between the Network User and AGN (or, if the Agreement is terminated earlier, the period from the Start Date until the date on which the Agreement is terminated).] ³

MDQ For a User Delivery Point which is a Demand Delivery Point, the MDQ is: <ul style="list-style-type: none">(a) the MDQ shown in relation to that User Delivery Point in Attachment 1 to these Specific Terms and Conditions; or(b) if the MDQ is not shown in that Attachment, the MDQ as agreed between AGN and the Network User or, in default of agreement, as determined by AGN, in accordance with, or determined in the manner set out in, the Access Arrangement (as defined below)² (in either case, as increased or decreased from time to time in accordance with the General Terms and Conditions (as defined below)).
Notice Details (for the Network User) Address: Telephone: Facsimile: E-mail:

¹ Insert the name and ABN of the Network User.

² Amend as appropriate to define the Delivery Points to which Gas is to be delivered.

³ Amend as appropriate to describe the Term.

Provisions of Agreement

This document evidences that AGN Limited and the Network User have entered into a haulage agreement (**the**

Agreement) for the provision of Network Services on and subject to the terms of the Agreement, which comprises:

- (a) the Specific Terms and Conditions set out in this document; and
- (b) the terms and conditions applicable to Haulage Reference Services under the Access Arrangement (including, but without limitation, the pre-conditions set out in sections 6.3 and 6.4 of the Access Arrangement) (**the General Terms and Conditions**).

Unless the context otherwise requires, terms used in the Agreement will have the same meanings as they have for the purpose of the Access Arrangement.

In these Specific Terms and Conditions, "**Access Arrangement**" means the access arrangement as in force from time to time under the National Gas Law (as defined in the *National Gas (South Australia) Act 2008 (the Act)*) in relation to AGN's South Australian gas distribution system.

EXECUTED as an Agreement on _____ day of _____ 20__

Executed by

(ABN _____)

in accordance with Section 127 of the Corporations Act

.....
Director

.....
Director/Secretary

.....
Name
(BLOCK LETTERS)

.....
Name
(BLOCK LETTERS)

Executed by

AGN LIMITED
(ABN 19 078 551 685)

in accordance with Section 127 of the Corporations Act

.....
Director

.....
Director/Secretary

.....

.....

Name
(BLOCK LETTERS)

Name
(BLOCK LETTERS)

ANNEXURE F cont'd

SCHEDULE 1

USER RECEIPT POINTS

1. The outlet of the Elizabeth Gate Station;
2. The outlet of the Gepps Cross Gate Station;
3. The outlet of the Taperoo Gate Station;
4. The outlet of the Nuriootpa Gate Station;
5. The outlet of the Angaston Gate Station;
6. The outlet of the Berri Gate Station;
7. The outlet of the Murray Bridge Gate Station;
8. The outlet of the Whyalla Gate Station;
9. The outlet of the Port Pirie Gate Station;
10. The outlet of the Peterborough Gate Station;
11. The outlet of the Mount Gambier Gate Station;
12. The downstream flange of the Epic Energy-owned Freeling Gate Station;
13. The outlet of the SEAGas Cavan Interconnection Pipeline; and
14. Any other point that AGN and the Network User may from time to time agree in writing is a User Receipt Point for the purposes of the Agreement.⁴

⁴ Amend as appropriate to describe the Receipt Points through which Gas will be delivered by or for the account of the Network User.

ANNEXURE F cont'd

ATTACHMENT 1

MDQs for DEMAND DELIVERY POINTS

This Annexure lists the User Delivery Points at the Start Date that are Demand Delivery Points at the Start Date and shows the MDQ for those User Delivery Points as at the Start Date. The User Delivery Points are the Delivery Points located at the addresses shown in the table below, which have been assigned the MIRNS shown in the table below (where MIRN has the meaning given to it in the Retail Market Procedures).

No.	Customer	MIRN	Address	MDQ (in GJ)

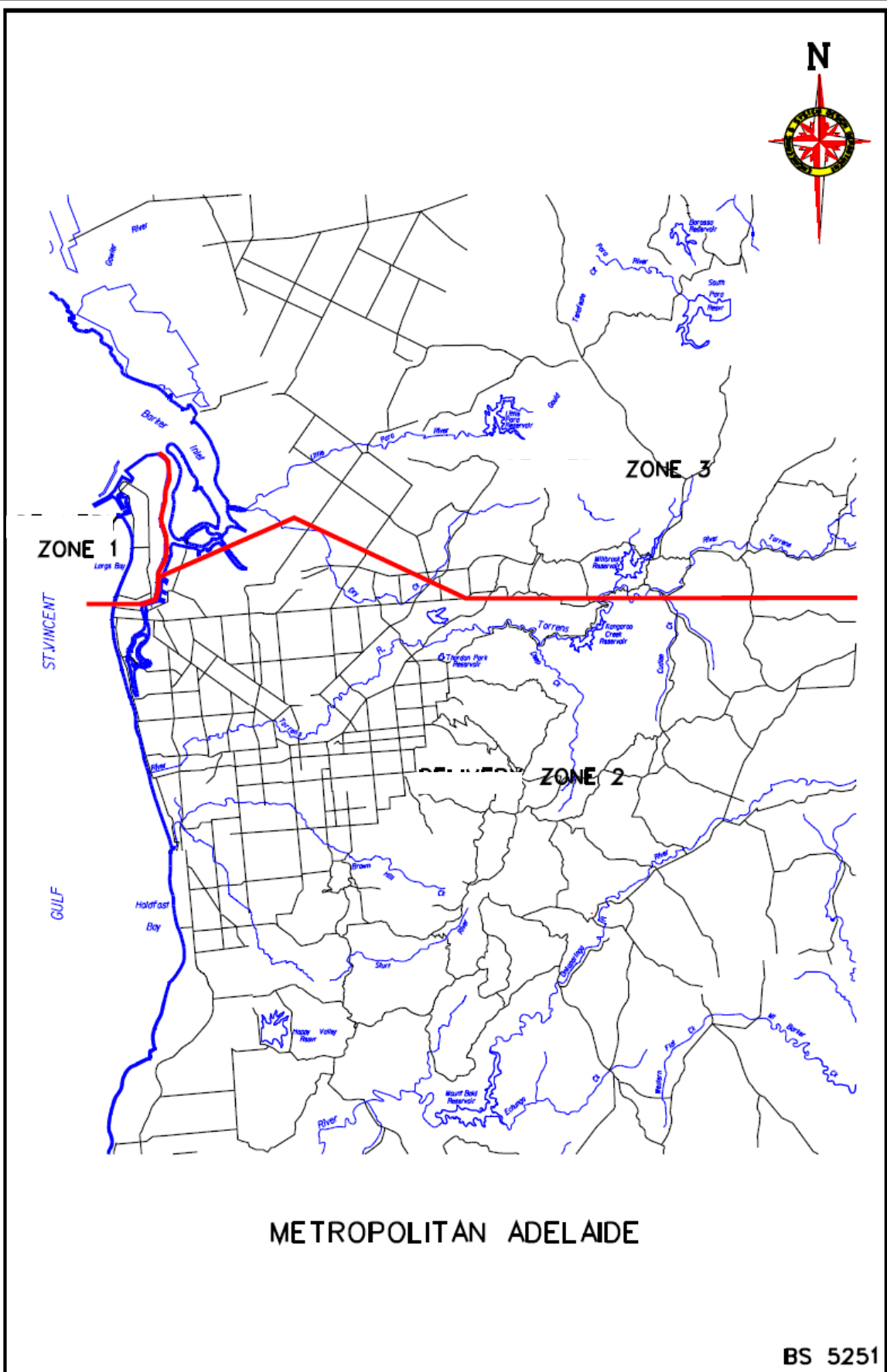
ANNEXURE G

General Terms and Conditions

(see separate document)

ANNEXURE H

Heating Value Zones in Metropolitan Adelaide



METROPOLITAN ADELAIDE

BS 5251

[DELETED]