

## **Attachment 12: Reference tariffs**

**Access Arrangement Information for the 2016-21 ACT,  
Queanbeyan and Palerang Access Arrangement**

**Submission to the Australian Energy Regulator**

**June 2015**



## Contents

<b>Key points</b>	<b>5</b>
Consumer benefits	5
12.1 Introduction	5
12.2 References to 'customer' in this attachment	6
12.3 Requirements of the National Gas Rules and National Gas Law	8
12.4 Summary of proposed revisions	8
12.5 Tariff classes and charge components in the 2010-15 access arrangement	9
12.5.1 Tariff market	9
12.5.2 Contract market	10
12.6 ActewAGL Distribution's approach to tariff setting	13
12.7 Proposed tariff classes and charge components	14
12.7.1 Proposed tariff structure and charge components for the 2016-21 access arrangement	14
12.7.2 Rationale for proposed tariff classes	16
12.7.3 Rationale for proposed tariff categories for intermediaries	18
12.7.4 Rationale for other proposed tariff categories	21
12.7.5 Assignment criteria	23
12.7.6 Initial tariff assignment process	28
12.7.7 Residential tariff class charge components	30
12.7.8 Business tariff class charge components	34
12.7.9 VRG, DBC, DBT and DBG tariff category charge components	36
12.7.10 Charges for ancillary activities	41
12.8 Allocation of revenue to services	42
12.9 Efficient pricing	42
12.9.1 The efficiency measures	43
List of appendices to this attachment	47
Abbreviations uses in this document	48

### **List of tables**

Table 12.1 Understanding ActewAGL Distribution's customers	7
Table 12.2 Tariff classes and charge components in the 2010-15 access arrangement	12
Table 12.3 Proposed tariff structure and charge components	15
Table 12.4 ActewAGL Distribution's proposed tariff categories	25
Table 12.5 VRI block sizes mapped to typical usage driver for small or first time gas consumers	33
Table 12.6 VRH block sizes mapped to typical usage driver for gas consumers with gas heating and other gas appliances	33
Table 12.7 VBS block sizes mapped to typical usage driver for business gas consumers	36
Table 12.8 VBM block sizes mapped to typical usage driver for business gas consumers	36
Table 12.9 DBC capacity block sizes mapped to typical usage driver for major customers	40
Table 12.10 DBG block sizes mapped to typical usage driver	41
Table 12.11 VRG block sizes mapped to typical usage drivers	41
Table 12.12 ActewAGL Distribution's standalone and avoidable costs and average revenue	43
Table 12.13 ActewAGL Distribution's LRMC by tariff component	44

### **List of Figures**

Figure 12.1 Initial tariff category assignment	29
--	----

## 12 Reference tariffs

### *Key points*

ActewAGL Distribution is proposing improvements to its reference tariff structure and tariffs for the 2016-21 access arrangement. The proposed revisions respond to changes in gas consumption behaviour as well as changes in the gas market and regulatory landscape, in a manner that supports the long term interests of consumers by:

- simplifying the charge components in the reference tariffs;
- creating a reference tariff structure that recognises differences in the ways in which consumers use gas;
- providing customers with cost reflective tariffs that encourage the efficient use and growth of the network over time;
- streamlining the process for major customers to seek additional gas capacity on the network; and
- creating a tariff assignment process to enable customers to respond to ActewAGL Distribution's reference tariffs.

### *Consumer benefits*

Consumers will benefit from the proposed reference tariff structure as it will:

- apply downward pressure on ActewAGL Distribution's network charges over time by encouraging new customers to connect to the network and stay connected to the network, and existing customers to use gas in a way that promotes the efficient use of the network (for example by using gas throughout the year rather than only for heating in winter); and
- make it easier for customers to compare retail offers.

### **12.1 Introduction**

In this attachment ActewAGL Distribution sets out its proposed approach to the setting of reference tariffs for the 2016-21 access arrangement period. ActewAGL Distribution has engaged with consumers, stakeholders and the community in developing the proposed reference tariffs and has addressed all the relevant regulatory requirements. The proposal involves several changes to the tariff classes and tariff structures offered in the 2010-15 access arrangement.

This attachment is structured as follows:

- a) section 12.2 provides a description of what ActewAGL Distribution means by various customer groupings referred to in this attachment;
- b) section 12.3 summarises the regulatory requirements;
- c) section 12.4 summarises the proposed changes for the 2016-21 access arrangement;
- d) section 12.5 summarises the tariff classes and charge components in the 2010-15 access arrangement;
- e) section 0 outlines ActewAGL Distribution's approach for setting tariffs;
- f) section 12.7 details proposed tariff classes and charge components in the 2016-21 access arrangement;
- g) section 12.8 explains how ActewAGL Distribution has allocated revenue to reference services and other services; and
- h) section 12.9 outlines how ActewAGL Distribution has:
  - a. developed economically efficient reference tariffs; and
  - b. considered the transaction costs and the ability of network users and customers to respond to price signals, in accordance with the Rules.

## ***12.2 References to 'customer' in this attachment***

There are references within this attachment to different customer types or groups. Table 12.1 explains the key terms used in the access arrangements, reference service agreement and reference tariff schedule to identify particular customer types or groups and the reasons for differentiating between them.

**Table 12.1 Understanding ActewAGL Distribution's customers**

Term	Description
business customer	means a customer who does not use gas for personal, domestic or household use.
customer	<p>means:</p> <ul style="list-style-type: none"> <li>the person who purchases the gas supplied at a delivery point; or</li> <li>a consumer of hot water in a residential unit where hot water is supplied through a centralised gas-fired hot water system and whose energy consumption is individually metered by ActewAGL Distribution to measure gas withdrawn at the relevant delivery point.</li> </ul> <p>This means that the customer will be the person who has the gas account with the retailer and is the same as the 'Shared Customer' under the National Energy Retail Law (NERL).</p> <p>A customer is not necessarily the end consumer if the gas is first sold to an intermediary.</p>
delivery point	means a point at which gas is withdrawn from the network.
end customer	<p>refers to the end consumer of the gas or energy at a delivery point.</p> <p>The end customer is usually the same as the customer except where there is an intermediary that is supplying gas or energy to them using the gas delivered by ActewAGL Distribution (in that case the intermediary is the customer).</p>
large customer	means, as defined in the NERL, a business customer who consumes equal to or more than 1 TJ of gas per year at a business premises.
major customer	means a major commercial or industrial end customer such as a government office, hospital or university which is reasonably expected to use more than 10 terajoules (TJ) of gas per year.
network user	refers to one or more users generally without referring to the specific 'user'.
non-residential end customer	means an end customer who does not use or consume the gas or energy at the delivery point for personal, domestic or household use.
residential customer	means a customer who uses gas for personal, domestic or household use.
residential end customer	means an end customer who uses or consumes the gas or energy at the delivery point for personal, domestic or household use.
small customer	means, as defined in the NERL, a residential customer who consumes less than 1 TJ of gas per year at a premises or a business customer who consumes less than 1 TJ of gas per year at a business premises.
user	means the person to whom ActewAGL Distribution is supplying a pipeline service pursuant to a contract or under an access determination. Used in the context of ActewAGL Distribution's contractual counterparty.

### **12.3 Requirements of the National Gas Rules and National Gas Law**

The Rules contain several requirements regarding the setting of reference tariffs:

- The access arrangement information must include the proposed approach to the setting of reference tariffs (Rule 72(j)).
- Total revenue and costs must be allocated between reference services and other services in accordance with the requirements set out in Rule 93.
- For the purpose of determining reference tariffs, customers for reference services must be divided into tariff classes, taking account of the principles set out in Rule 94(1).
- Tariff classes must be established with regard to:
  - the need to group customers for reference services together on an economically-efficient basis; and
  - the need to avoid unnecessary transaction costs (Rule 94(2)).
- For each tariff class, the revenue expected to be recovered must lie between the standalone cost of providing the reference service to customers who belong to that class (upper bound) and the avoidable cost of not providing the reference service to those customers (lower bound) (Rule 94(3)).
- Tariffs and charging parameters for each tariff class must take account of the long-run marginal cost of providing the service and be determined having regard to transactions costs and whether customers are likely or able to respond to price signals (Rule 94(4)).
- Tariffs may be adjusted to ensure recovery of expected revenue with minimum distortion to efficient patterns of consumption (Rule 94(5)).

These requirements are discussed in the relevant sections below.

ActewAGL Distribution's proposed reference tariffs must also be consistent with the overarching requirements, set out in the National Gas Law (NGL), to promote the National Gas Objective (NGO) and be consistent with the revenue and pricing principles. The overarching regulatory requirements are discussed in the Overview to this access arrangement information.

### **12.4 Summary of proposed revisions**

ActewAGL Distribution is proposing to make several changes to its reference tariff structure and tariffs for the 2016-21 access arrangement. The key proposed changes are as follows.

#### **a) Changing the tariff classes and introducing new tariff categories**

ActewAGL Distribution is proposing to change the way it groups customers together by grouping customers into residential and business tariff classes and introducing tariff categories within each tariff class to:



- recognise that customers have different energy and customer characteristics and ways in which they use gas; and
- provide more cost reflective tariffs to encourage the efficient use and growth of the network.

**b) Simplifying the charge components**

ActewAGL Distribution is proposing to consolidate its three fixed charges into a single fixed charge to make it easier for customers to compare retail offers.

**c) Introducing a tariff assignment process**

ActewAGL Distribution is proposing to facilitate access to the new tariff categories and enable customers to respond to the tariffs by introducing a tariff assignment process in the 2016-21 access arrangement.

**d) Simplifying the process for major customers to seek additional capacity**

ActewAGL Distribution is proposing to simplify the process for major customers to seek additional gas capacity on the network by moving to a chargeable demand-based charge, consistent with the approach adopted by Jemena Gas Networks (JGN), and approved by the Australian Energy Regulator (AER).

**e) Setting more cost reflective ancillary charges**

ActewAGL Distribution is proposing to set more cost-reflective charges for ancillary activities.

## **12.5 Tariff classes and charge components in the 2010-15 access arrangement**

For the 2010-15 access arrangement, customers are split into two tariff classes:

- **Tariff market** — customers who are reasonably expected to use less than or equal to 10 TJ of gas per year at the delivery point (generally residential and business customers); and
- **Contract market** — customers who are reasonably expected to use more than 10 TJ of gas per year at the delivery point (generally major commercial or industrial customers).

### **12.5.1 Tariff market**

Tariff market customers are on a Tariff Service and Meter Data Service, and are subject to the tariffs for these services in their retail bills.

Tariffs for customers on a Tariff Service and Meter Data Service include:

- three fixed charges — the fixed charges vary depending on whether the meter at the delivery point is read quarterly or monthly and whether there is a less than or greater than 6m<sup>3</sup>/hour meter set installed at the delivery point; and

- four usage block sizes with a lower price for gas consumed in the higher usage blocks<sup>1</sup>, where:
  - the first block is the first 3.75 gigajoules (GJ) per quarter or 1.25 GJ per month of gas consumed at the delivery point;
  - the second block is the next 246.75 GJ per quarter or 82.25 GJ per month of gas consumed at the delivery point;
  - the third block is the next 1000.5 GJ per quarter or 333.5 GJ per month of gas consumed at the delivery point; and
  - the fourth block is any remaining gas consumed at the delivery point in that quarter or month.

### 12.5.2 Contract market

Contract market customers have the option of nominating one of the following reference services through their retailer:

- Capacity Reservation Service;
- Managed Capacity Service;
- Throughput Service; or
- Multiple Delivery Point Service.

Contract market customers are also on the Meter Data Service, and are subject to the tariffs for the relevant nominated reference service and Meter Data Service in their retail bills.

Tariffs for customers on a Meter Data Service and either a Capacity Reservation Service or Managed Capacity Service include:

- three fixed charges which vary depending on the type of meter and the number of delivery stations installed at the delivery point;
- one capacity charge which is calculated on the contracted maximum daily quantity at the delivery point;
- overrun charges for any gas consumption in excess of the contracted maximum daily quantity on any day;
- gas balancing charges which relate to the costs for ActewAGL Distribution to inject additional gas into the network where there is a shortfall between the quantity of gas

---

<sup>1</sup> Customers who are reasonably expected to use less than 1 TJ of gas per annum will be on the quarterly usage blocks as the gas meters at their premises are read quarterly. Customers who are reasonably expected to use more than 1 TJ of gas per annum with no daily meter reading equipment will be on the monthly usage blocks as the gas meters at their premises are read monthly.

injected into the network and the quantity of gas withdrawn from the network by customers on any given day; and

- short-term capacity charges for customers who are reasonably expected to use less than 30 TJ of gas per year at the delivery point.

Tariffs for customers on a Meter Data Service and Throughput Service include:

- three fixed charges which vary depending on the type of meter and the number of delivery stations installed at the delivery point;
- one usage charge which is calculated on the quantity of gas consumed at the delivery point; and
- gas balancing charges.

A Multiple Delivery Point Service is a service to a network user with multiple contract market customers on a Meter Data Service and either a Capacity Reservation Service, Managed Capacity Service or Throughput Service.

**Table 12.2 Tariff classes and charge components in the 2010-15 access arrangement**

Tariff classes	
<p><b>Contract Market</b> — customers who are reasonably expected to use more than 10 TJ of gas per year (generally major commercial or industrial customers)</p>	<p><b>Tariff Market</b> — customers who are reasonably expected to use less than or equal to 10 TJ of gas per year (generally residential and business customers)</p>
Reference Services <sup>2</sup>	
<ul style="list-style-type: none"> <li>Capacity Reservation Service</li> <li>Managed Capacity Service</li> <li>Throughput Service</li> <li>Meter Data Service</li> <li>Multiple Delivery Point Service: a service to a network user with multiple contract market customers on a Meter Data Service and either a Capacity Reservation Service, Managed Capacity Service or Throughput Service</li> <li>Ancillary Service: a service requested by a network user or customer which is subordinate or secondary to the transportation of gas through the network (e.g. a special meter read or disconnection)</li> </ul>	<ul style="list-style-type: none"> <li>Tariff Service</li> <li>Meter Data Service</li> <li>Ancillary Service: a service requested by a network user or customer which is subordinate or secondary to the transportation of gas through the network (e.g. a special meter read or disconnection)</li> </ul>
Charge components	
<p>Meter Data Service and either a Capacity Reservation Service or Managed Capacity Service</p> <ul style="list-style-type: none"> <li>three fixed charges</li> <li>one capacity charge</li> <li>overrun charges</li> <li>gas balancing charges</li> <li>short-term capacity charges</li> </ul>	<p>Tariff Service and Meter Data Service</p> <ul style="list-style-type: none"> <li>three fixed charges</li> <li>four usage block sizes</li> </ul>
<hr/> <p>Throughput Service and Meter Data Service</p> <ul style="list-style-type: none"> <li>three fixed charges</li> <li>one usage charge</li> <li>overrun charges</li> <li>gas balancing charges</li> </ul> <hr/>	

<sup>2</sup> The services are described in the *Services Policy* in section 2 of the access arrangement and an explanation for the changes to the services is set out attachment 2 of this access arrangement information.

## 12.6 ActewAGL Distribution's approach to tariff setting

ActewAGL Distribution is proposing several changes to the services and reference tariffs offered in the 2010-15 access arrangement. The services are described in the *Services Policy* in section 2 of the 2016-21 access arrangement and an explanation for the changes to the services is set out in attachment 2 of this access arrangement information. The proposed change to a single haulage reference service underpins the proposed reference tariff structure.

This section explains ActewAGL Distribution's approach to the setting of reference tariffs, as required under Rule 72(j).

ActewAGL Distribution has considered the following objectives for setting the tariffs for the 2016-21 access arrangement period and over the longer term:

- **recover efficient costs** — ActewAGL Distribution needs to recover at least its efficient costs to continue providing safe and reliable network services to customers now and into the future;
- **promote the efficient use and growth of the network** — set cost-reflective tariffs to enable customers to respond to the tariffs and encourage the efficient use and growth of the network;
- **treat customers equitably** — ensure similar customers are grouped together and pay prices that reflect the costs they impose on the network;
- **keep gas competitive** — maintain and enhance the attractiveness and position of natural gas as a value-for-money fuel of choice, and promote competition with alternative energy sources;
- **provide stability in network tariffs** — where possible, minimise any sudden changes in network tariffs; and
- **provide simplicity and transparency in tariffs** — consider customer preferences and the transaction costs of providing customised tariffs, provide information on the tariffs and any tariff variations to help customers understand and be able to respond to the tariffs, and ensure consumers, stakeholders and the community value and support changes made by ActewAGL Distribution.

ActewAGL Distribution consulted with consumers, stakeholders and the community on these objectives and had regard to the NGO and revenue and pricing principles in the NGL in setting these objectives. ActewAGL Distribution has applied these objectives to provide for economically efficient tariff classes and tariffs consistent with Rule 94.

## 12.7 Proposed tariff classes and charge components

Rule 94(2) requires tariff classes to be established with regard to:

- the need to group customers for reference services together on an economically-efficient basis; and
- the need to avoid unnecessary transaction costs.

For the 2016-21 access arrangement, ActewAGL Distribution is proposing to change the tariff classes and to introduce new tariff categories within each tariff class to better meet the requirements of Rule 94 and its pricing objectives, as described in the following sections.

### 12.7.1 Proposed tariff structure and charge components for the 2016-21 access arrangement

ActewAGL Distribution is proposing to offer the following tariff structure and charge components in its 2016-21 access arrangement.

- Customers will be assigned to one of the following **two customer groups**:
  - demand customer group (D); or
  - volume customer group (V).
- Customers will be assigned to one of the following **two tariff classes within each customer group**:
  - business tariff class (B); or
  - residential tariff class (R).
- Customers in the **business tariff class** can be assigned to one of the following **five tariff categories**:
  - small business individually metered (VBS) tariff category;
  - medium business individually metered (VBM) tariff category;
  - major customer capacity (DBC) tariff category;
  - major customer throughput (DBT) tariff category; or
  - large scale generation principally for business end customers (DBG) tariff category.
- Customers in the **residential tariff class** can be assigned to one of the following **four tariff categories**:
  - residential individually metered (VRI) tariff category;
  - residential individually metered with gas heating and other gas appliances (VRH) tariff category;
  - residential boundary metered (VRB) tariff category; or

- large scale generation principally for residential end customers (VRG) tariff category.

**Table 12.3 Proposed tariff structure and charge components**

Reference service		
Haulage Reference Service		
Customer groups		
Volume (V)		Demand (D)
Tariff classes		
Residential (R)	Business (B)	
Tariff categories		
<ul style="list-style-type: none"> <li>• residential individually metered (VRI)</li> <li>• residential individually metered with gas heating and other gas appliances (VRH)</li> <li>• residential boundary metered (VRB)</li> <li>• large scale generation principally for residential end customers (VRG)</li> </ul>	<ul style="list-style-type: none"> <li>• small business individually metered (VBS)</li> <li>• medium business individually metered (VBM)</li> </ul>	<ul style="list-style-type: none"> <li>• major customer capacity (DBC)</li> <li>• major customer throughput (DBT)</li> <li>• large scale generation principally for business end customers (DBG)</li> </ul>
Charge Components		
<ul style="list-style-type: none"> <li>• VRI                             <ul style="list-style-type: none"> <li>○ one fixed charge</li> <li>○ four usage block sizes</li> </ul> </li> <li>• VRH                             <ul style="list-style-type: none"> <li>○ one fixed charge</li> <li>○ three usage block sizes</li> </ul> </li> <li>• VRB                             <ul style="list-style-type: none"> <li>○ one fixed charge</li> <li>○ three usage block sizes</li> </ul> </li> <li>• VRG                             <ul style="list-style-type: none"> <li>○ one fixed charge</li> <li>○ three capacity usage block sizes</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• VBS                             <ul style="list-style-type: none"> <li>○ one fixed charge</li> <li>○ three usage block sizes</li> </ul> </li> <li>• VBM                             <ul style="list-style-type: none"> <li>○ one fixed charge</li> <li>○ three usage block sizes</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• DBC                             <ul style="list-style-type: none"> <li>○ one fixed charge</li> <li>○ three capacity usage block sizes</li> </ul> </li> <li>• DBT                             <ul style="list-style-type: none"> <li>○ one fixed charge</li> <li>○ one usage charge</li> </ul> </li> <li>• DBG                             <ul style="list-style-type: none"> <li>○ one fixed charge</li> <li>○ three capacity usage block sizes</li> </ul> </li> </ul>

## 12.7.2 Rationale for proposed tariff classes

### 12.7.2.1 2010-15 access arrangement

The tariff classes in the 2010-15 access arrangement are based on the delivery of gas to a single customer at a delivery point and the quantity of gas the customer is reasonably expected to use at the delivery point over a year.

The tariff classes are split between:

- a single customer who is reasonably expected to use more than 10 TJ of gas per year (known as a contract market customer); and
- a single customer who is reasonably expected to use less than or equal to 10 TJ of gas per year (known as a tariff market customer).

This tariff class split was appropriate for the 2010-15 access arrangement period when:

- gas consumption patterns and the gas market were relatively stable; and
- the main reason for differentiating between customers was for contract market customers to have a reasonable maximum daily quantity specified for the delivery point given the larger individual impact they had on the network compared to tariff market customers.

### 12.7.2.2 2016-21 access arrangement

There are a number of reasons why the reference tariff structure from 2010-15 needs to be revised:

- gas consumption behaviour is changing (e.g. customers are more conscious of the quantity of energy consumed at their premises and are looking for ways to reduce their energy consumption, such as investing in more energy-efficient appliances and insulation);
- the gas market and regulatory landscape is changing (e.g. wholesale gas prices are forecast to rise which may make gas less competitive, and the ACT government has introduced policy to achieve a 90 per cent renewable energy target in the ACT by 2020);
- gas is facing increasing competitive pressure from alternative fuels and energy efficiency measures;
- customers have different energy and customers characteristics and ways in which they use gas (e.g. residential customers tend to use gas early in the morning and in the afternoon, while business customers tend to use gas for commercial purposes during business hours);
- there are only a few customers who use more than 10 TJ of gas per year on ActewAGL Distribution's network and even fewer large commercial or industrial customers with flat gas consumption profiles; and



- most of the gas is currently consumed on ActewAGL Distribution's network during the winter morning and afternoon periods, predominantly for heating.

To enable ActewAGL Distribution to set tariffs to support the pricing objectives set out in section 0, and to have regard to the NGO and the revenue and pricing principles in the NGL, for the 2016-21 access arrangement ActewAGL Distribution proposes to:

- group customers into the demand or volume customer group — customers in the demand customer group are reasonably expected to use more than 10 TJ of gas per year and therefore have a larger individual impact on the network than customers who use less gas. To ensure the commercial arrangements between ActewAGL Distribution and network users continue to manage the commercial and operational risks these customers impose on the network (e.g. by requiring the network user to specify a maximum daily quantity for the demand customer's delivery point), ActewAGL Distribution has grouped customers into the demand or volume customer group;
- group customers into residential and business tariff classes and introduce new tariff categories within each tariff class. The change in the tariff class split recognises:
  - the nature in which gas is used at a delivery point is changing (e.g. there may be intermediaries on-selling gas or energy to end customers at the delivery point);<sup>3</sup>
  - the gas usage pattern of a residential and business customer differ more than the gas usage patterns of customers who use more or less than 10 TJ of gas per year (e.g. residential customers tend to use gas for heating in the morning and afternoon, while business customers tend to use gas for commercial purposes during business hours); and
  - for ActewAGL Distribution to set cost reflective tariffs which can enable customers to respond to the tariffs and promote the efficient use and growth of the network, which is in the long-term interests of consumers, it will be more economically efficient for ActewAGL Distribution to:
    - group customers into tariff classes based on the end customers' characteristics at the delivery point (that is, whether there are residential or business end customers at the delivery point); and
    - introduce tariff categories within each tariff class so that similar customers pay similar prices to minimise any inconsistent cross-subsidisation between customers and to enable ActewAGL Distribution to set cost-reflective tariffs based on the energy and customer characteristics and the way in which customers use gas.<sup>4</sup>

<sup>3</sup> For information on the intermediaries, please refer to section 12.7.3

<sup>4</sup> For information on the tariff categories please refer to sections 12.7.3 and 12.7.4.

For the 2016-21 access arrangement, it is proposed that:

- customer delivery points be assigned to one of two **customer groups — the demand or volume customer group based on the characteristics of the energy requirements** of the customer and any other end customers that are supplied with, or consume, energy from the gas delivered by ActewAGL Distribution to the delivery point;
- customer delivery points be assigned to one of two **tariff classes — the residential or business tariff class based on the characteristics of the end customers** that are supplied with, or consume, energy from the gas delivered by ActewAGL Distribution to the delivery point; and
- customer delivery points be assigned to one of five **tariff categories** for the business tariff class and one of four tariff categories for the residential tariff class **based on the ways in which the customer uses or consumes the gas or energy at the delivery point.**

### 12.7.3 Rationale for proposed tariff categories for intermediaries

ActewAGL Distribution's current reference services are based on gas supply to a single customer who is the ultimate end consumer of energy occupying the premises, where the 'end consumer' is the end customer. This approach has been developed to enable customers to an individual gas meter installed at the delivery point and therefore an individual gas bill for their gas use.

Consumers of hot water in a residential unit on ActewAGL Distribution's network where hot water is supplied through a centralised gas-fired hot water system will have an individual gas hot water meter installed at the delivery point and an individual gas bill for their gas hot water use.

For the 2016-21 access arrangement, ActewAGL Distribution is proposing to introduce three intermediary tariff categories:

- a) **VRB tariff category** — available to boundary meter arrangements where gas is sold to an intermediary such as an owners' corporation who then on-sells the gas to end customers at the delivery point;
- b) **DBG tariff category** — available to co-generation or tri-generation facilities where gas is sold to the facility operator who then on-sells energy to either a single business end customer or principally business end customers at the delivery point; and
- c) **VRG tariff category** — available to co-generation or tri-generation facilities where gas is sold to the facility operator who then on-sells energy principally to residential end customers at the delivery point.

The rationale for introducing these tariff categories in the 2016-21 access arrangement is set out below.

### 12.7.3.1 Supplying gas to a boundary meter that is then on-sold to end customers by an intermediary

In 2013, ACT legislation<sup>5</sup> was amended to prohibit the internal installation of gas meters for gas appliances such as cooking and heating (but not hot water) in high-rise dwellings and commercial complexes such as shopping centres. ActewAGL Distribution's customers, including property developers and builders, advised ActewAGL Distribution that this legislative amendment has made it too costly to install gas piping inside the high-rise dwelling or commercial complex to enable ActewAGL Distribution to install individual external gas meters to each end customer for their cooking and heating needs. As a result, this has effectively removed the option for these end customers to choose gas as an affordable energy source.

ActewAGL Distribution has considered the potential effects of this legislative amendment on these end customers and considers there is benefit in introducing a tariff category to allow the installation of a single boundary meter (rather than individual external gas meter installations for each end customer) at the delivery point to provide an option for these end customers to have access to gas at high-rise dwellings and commercial complexes.

The effect of this boundary-metered arrangement is to allow an intermediary, such as an owners corporation to enter into a gas sales arrangement with an energy retailer and then on-sell the gas to end customers at the delivery point. This means the end customers at the delivery point will not have the option to choose their gas retailer or have access to individual metering or billing for their gas appliances (these end customers will still have retailer choice and individual metering and billing for their gas hot water needs as the legislative amendment does not affect gas hot water meter installations).

The usage charges for these boundary-metered arrangements will be based on the usage charges for end customers with individual gas meters at the delivery point to ensure that similar customers are grouped together and pay prices that reflect the costs they impose on the network, consistent with ActewAGL Distribution's pricing objectives set out in section 0, the Rules and the revenue and pricing principles.

ActewAGL Distribution recognises this boundary-metered arrangement will limit access to individual metering and billing for their gas needs but considers the benefits to these customers from having a more practical choice in accessing gas, and more competition for their energy choices, outweighs the impact on these customers from a boundary-metered arrangement.

---

<sup>5</sup> The *ACT Gas Service and Installation Rules Code* set out in the Utilities (Gas Service and Installation Rules Code) Determination 2013 and the *ACT Gas Boundary Network Code* set out in the Utilities (Gas Network Boundary Code) Determination 2013.

### **12.7.3.2 Co-generation / tri-generation supplying principally business end customers**

During ActewAGL Distribution's engagement sessions, major customers advised ActewAGL Distribution that they were keen to install co-generation or tri-generation facilities at their premises to provide for their energy needs.

Currently, most of the gas on ActewAGL Distribution's network is consumed during the winter morning and afternoon peaks, predominantly for heating. This gas consumption pattern has also been observed from major customers.

Operators of co-generation and tri-generation facilities advised ActewAGL Distribution that they tend to be base load users with a relatively flat gas consumption pattern throughout the day and the year.

ActewAGL Distribution considers there are long-term benefits to consumers from co-generation and tri-generation facilities that supply gas or energy to either a single business end customer or principally business end customers as these facilities are:

- reasonably expected to use gas throughout the day and the year, thereby promoting the efficient use of the network; and
- expected to pay for the cost of their own connection to the network, thereby promoting the efficient growth of the network.

For these reasons, ActewAGL Distribution has proposed a new tariff category with capacity charges which are lower than the capacity charges for existing single business customers who use equal to or more than 10 TJ of gas per year to support ActewAGL Distribution's pricing objectives set out in section 0 to:

- provide more cost-reflective tariffs; and
- encourage these facilities to respond to these tariffs to connect to the network to promote the efficient use and growth of the network, which is in the long-term interests of consumers.

### **12.7.3.3 Co-generation /tri-generation supplying principally residential end customers**

During ActewAGL Distribution's engagement sessions, customers, including property developers and builders, advised ActewAGL Distribution that it was unlikely that any co-generation or tri-generation facilities would be installed in residential complexes within ActewAGL Distribution's network. As a result, ActewAGL Distribution has forecast no customers will be on this tariff category during the 2016-21 access arrangement period.

One of the criteria for customers to be eligible for this tariff category is the customer must be reasonably expected to use equal to or more than 50 TJ of gas per year at the delivery point.

This criterion is consistent with the approach used by JGN in its 2015-20 access arrangement,<sup>6</sup> and approved by the AER,<sup>7</sup> and is based on customer feedback to JGN that scale is an important

---

<sup>6</sup> JGN, *Access Arrangement 2015-20*, June 2015, Schedule 2.

factor for the viability of co-generation and tri-generation facilities and only larger scale gas co-generation or tri-generation systems (at least 2MW of electrical output) are technically and economically viable over the long term due to the high development and capital costs required for distributed energy systems.

To ensure ActewAGL Distribution can recover a return commensurate with the commercial risks involved in providing a service to these facilities, ActewAGL Distribution proposes two tariff categories to distinguish between:

- co-generation and tri-generational facilities on-supplying principally business customers — an eligibility criteria for this tariff category is the customer must be reasonably expected to use equal to or more than 10 TJ of gas per year; and
- co-generation and tri-generational facilities on-supplying principally residential customers — as outlined above, an eligibility criteria for this tariff category is the customer must be reasonably expected to use equal to or more than 50 TJ of gas per year for the reasons set out above.

ActewAGL Distribution has observed these co-generation and tri-generational facilities arrangements in other jurisdictions within Australia and overseas and considers there is merit in encouraging discussion with prospective customers by introducing a tariff category for this arrangement in the 2016-21 access arrangement.

From experience, ActewAGL Distribution can better facilitate discussion with prospective network users and customers to encourage these innovative uses of gas if there is a streamlined process for facilitating access to these services and clear pricing signals in the reference tariff schedule.

If ActewAGL Distribution does not introduce this tariff category in its reference tariff schedule, a prospective network user will need to request a negotiated service to connect these co-generation or tri-generation facilities at a residential complex to the network. This is because, under this scenario, this service will not be a reference service. The negotiated service process involves the negotiation of a new arrangement between the parties, which can be time-consuming and costly. As a result, ActewAGL Distribution prefers to introduce this tariff category in its reference tariff schedule so that it can streamline the connection process.

ActewAGL Distribution will revisit the benefits of offering this tariff category in its reference tariff schedule over the 2016-21 access arrangement period if the prospects of customer up-take do not improve over this period.

#### **12.7.4 Rationale for other proposed tariff categories**

For the 2016-21 access arrangement, ActewAGL Distribution is proposing to introduce tariff categories to differentiate between different customer segments.

---

<sup>7</sup> AER 2015, *Access Arrangement final decision – Jemena Gas Networks (NSW) Ltd 2015-20*, June, Attachment 10.

The rationale for this is to recognise that:

- customers have different energy and customer characteristics and ways in which they use gas;
- some uses of gas promote the efficient use and growth of the network more than others;
- the tariffs for each tariff category should be set to encourage customers to connect to the network and use gas in a way which promotes the efficient use and growth of the network, which is in the long-term interests of consumers.

ActewAGL Distribution considers that it is in the long-term interests of consumers if ActewAGL Distribution encourages existing customers to use more gas throughout the year through the installation of multiple gas appliances or commercial applications at the delivery point to promote the efficient use of the network.

This is because:

- currently, most of the gas on ActewAGL Distribution's network is consumed during the winter morning and afternoon peaks, predominantly for heating;
- the network can be better utilised if ActewAGL Distribution can encourage its customers to use gas throughout the year rather than solely for heating;<sup>8</sup> and
- more gas use on the network throughout the year will allow ActewAGL Distribution to recover its efficient costs and apply downward pressure on the network charges for all customers over the long term<sup>9</sup>.

ActewAGL Distribution is proposing to introduce the following three tariff categories to promote the efficient use of the network throughout the year.

- **VRH tariff category** — available to customers with gas heating and other gas appliances at the delivery point. The rationale for this tariff category is to encourage customers to use gas throughout the year by installing multiple gas appliances at the delivery point, rather than solely gas heating.
- **VBS tariff category** — available to business customers. The rationale for this tariff category is to encourage business customers to choose to install gas appliances over alternative energy solutions at the delivery point to encourage the use of gas throughout the year, in particular, commercial gas appliances such as commercial gas cooking, gas-powered washing machines and dryers, and gas-powered air-conditioners.

---

<sup>8</sup> The network has been designed to deliver gas to meet the forecast peak daily and hourly gas consumption demands of customers to ensure ActewAGL Distribution can provide a reliable and safe gas transportation service to its customers. This means there is capacity on the network for customers to consume gas throughout the year, particularly during the summer and spring period.

<sup>9</sup> This is because most of ActewAGL Distribution's costs are fixed costs, which it mainly recovers through its usage charges.

- **VBM tariff category** — available to medium-sized business customers who are reasonably expected to use equal to or more than 8 TJ of gas per year at the delivery point. This tariff category has been introduced to reduce the price disparity for customers who use less than 10 TJ of gas per year compared to customers who use more than 10 TJ of gas per year.

During ActewAGL Distribution's engagement sessions, customers indicated that they were supportive of ActewAGL Distribution's intention to promote the efficient use of the network by encouraging customers to use gas over the low gas usage periods (spring and summer).

ActewAGL Distribution considers it is in the long-term interests of consumers if ActewAGL Distribution encourages new customers to connect to the network where it is economic to do so, as this will lead to lower network charges for all customers over the long term.<sup>10</sup>

This is because most of ActewAGL Distribution's costs are fixed costs, and by expanding the customer base, ActewAGL Distribution can lower the network charges for all customers over the long term by recovering these costs across a larger customer base.

ActewAGL Distribution is proposing a **VRI tariff category** for first time or small gas users. This tariff will have a lower fixed charge compared to the other tariff categories to encourage new customers to connect to the network and stay connected to the network.

ActewAGL Distribution will continue to offer major customers a capacity-based tariff in the form of the **DBC tariff category**, and a throughout-based tariff in the form of the **DBT tariff category**.

### 12.7.5 Assignment criteria

The 2010-15 access arrangement did not include any assignment criteria as:

- all **tariff market customers** are on a Tariff Service and Meter Data Service, and are subject to the tariffs for these services; and
- all **contract market customers** are on a Meter Data Service and either a Capacity Reservation, Managed Capacity or Throughput Service, and are subject to the tariffs for these services.

For the 2016-21 access arrangement period, ActewAGL Distribution proposes to consolidate the seven reference services into one reference service (the haulage reference service) and to introduce a new assignment criteria to group similar customers together.

---

<sup>10</sup> During ActewAGL Distribution's customer engagement sessions, customers indicated that they were concerned existing customers on the network were cross-subsidising the cost of new customer connections. As expanding the network would involve additional costs, ActewAGL Distribution will only do this where the additional revenue obtained from new customers exceeds the additional costs to extend the network to these customers. In this case, it would be economic for ActewAGL Distribution to connect new customers to the network. This ensures existing customers do not inefficiently subsidise the costs of connecting new customers.

Under the new tariff assignment criteria, a customer's delivery point will be assigned to a tariff category based on the following three elements:

- a) the customer group;
- b) the tariff class; and
- c) additional tariff category assignment criteria.

#### 12.7.5.1 Customer group

A customer's delivery point will be assigned to a customer group based on the characteristics of the energy requirements of the customer and any other end customers that are supplied with, or consume, energy from the gas delivered by ActewAGL Distribution to the delivery point.

The two customer groups are:

- the **demand customer group**, which is available to:
  - a single business end customer who is reasonably expected to use equal to or more than 10 TJ of gas per year at their delivery point;
  - a customer operating a co-generation or tri-generation facility who is reasonably expected to use equal to or more than 10 TJ of gas per year, and who supplies energy to principally business end customers at the delivery point; or
  - a single customer operating a co-generation or tri-generation facility who is reasonably expected to use equal to or more than 10 TJ of gas per year, and who supplies energy to a single business end customer at the delivery point.

These customers will also need to provide ActewAGL Distribution with emergency load management system (ELMS) information before they can be eligible for the demand customer group given the larger impact they have on the network; and

- the **volume customer group**, which is available to a customer who does not satisfy the criteria for a demand customer group and who is:
  - a single residential customer who uses gas at the delivery point;
  - a single business customer who uses gas at the delivery point;
  - a customer operating a co-generation or tri-generation facility who supplies energy to principally residential end customers at the delivery point; or
  - a single customer who on-supplies gas to end customers for gas appliances such as gas cooking and gas heating, but not gas hot water, at the delivery point.

#### 12.7.5.2 Tariff class

A customer's delivery point will be assigned to a tariff class based on the characteristics of the end customers that are supplied with, or consume, energy from the gas delivered by ActewAGL Distribution to the delivery point.



The two tariff classes are:

- the **business tariff class**, which is available to a customer at the delivery point where the gas or energy is used at the delivery point by either a single business end customer or principally business end customers; and
- the **residential tariff class**, which is available to a customer at the delivery point who does not satisfy the criteria for a business tariff class.

### 12.7.5.3 Tariff categories

A customer (through their retailer) may request to be assigned to a tariff category based on the additional criteria set out in Table 12.4. ActewAGL Distribution recognises that customers have different ways in which they use or consume the energy or gas at the delivery point. To support the pricing objectives set out in section 0, the tariff assignment criteria ensures that similar customers pay similar prices which reflect the costs they impose on the network.

**Table 12.4 ActewAGL Distribution's proposed tariff categories**

Tariff category	Abbreviation	Type of customers	Why included
Volume Residential Individually metered	VRI	End customers who have individual gas meters, and are using gas for the first time, or use small quantities of gas at the delivery point.	This tariff category is available for end customers who do not request assignment to another tariff category through their retailer. This tariff category is similar to the tariffs for the Tariff Service under the 2010-15 access arrangement.
Volume Residential Individually metered (gas heating combined with other gas appliances)	VRH	End customers who have individual gas meters, and use gas heating and other gas appliances at the delivery point.	This tariff category aims to encourage end customers to install multiple gas appliances at the delivery point to encourage the use of gas throughout the year rather than solely for heating to promote the efficient use of the network.

Tariff category	Abbreviation	Type of customers	Why included
Volume Residential Boundary metered	VRB	End customers in high-rise dwellings or commercial complexes such as shopping centres that are supplied gas for their gas appliances or applications (other than for gas hot water) by an energy intermediary that sits between the boundary meter and the end customer.	<p>This tariff category aims to provide end customers who are affected by the legislative amendment preventing the internal installation of gas meters for cooking and heating in multi-storey complexes with the option to access gas through a boundary-metered connection.</p> <p>This tariff category is not available for gas hot water boundary-metered arrangements as the legislative amendment does not affect the installation of gas hot water meters. Any requests for a gas hot water boundary-metered arrangement will be considered as a request for a negotiated service under the 2016-21 access arrangement.</p>
Volume Residential Large Scale Generation	VRG	Residential end customers supplied energy by an intermediary using a large scale generation unit in a residential precinct and who is reasonably expected to use equal to or more than 50 TJ of gas per year.	Recent technological, market and policy developments mean residential end customers in large precincts may be supplied electricity, heating or cooling from a gas-fired plant (co-generation or tri-generation). ActewAGL Distribution encourages innovative, efficient and customer focused energy services, and promotes gas usage to lower average prices for all customers.
Volume Small Business individually metered	VBS	Business end customers who have individual gas meters, and use commercial gas appliances and applications at the delivery point.	This tariff category aims to encourage business end customers to install commercial gas appliances and applications (such as gas-powered commercial air-conditioners, washing machines and dryers) at the delivery point to encourage the use of gas throughout the year to promote the efficient use of the network. This tariff category also recognises that business customers are likely to use gas throughout the day, rather than solely during the morning and evening, as observed from the residential customers.
Volume Medium Business individually metered	VBM	Medium business end customers who have individual gas meters and are reasonably expected to use equal to or more than 8 TJ of gas per year.	This tariff category aims to encourage customers to install commercial and industrial gas applications at the delivery point to encourage the use of gas throughout the year to promote the efficient use of the network.

Tariff category	Abbreviation	Type of customers	Why included
Demand Business Capacity	DBC	Major customers who are reasonably expected to use equal to or more than 10 TJ of gas per year.	This tariff category is similar to the tariffs for the Capacity Reservation Service and Managed Capacity Service under the 2010-15 access arrangement.
Demand Business Throughput	DBT	Major customers who are reasonably expected to use equal to or more than 10 TJ of gas per year.	This tariff category is similar to the tariffs for the Throughput Service under the 2010-15 access arrangement.
Demand Business Large Scale Generation	DBG	Major customer or a group of substantially <sup>11</sup> business end customers occupying premises or nearby premises who are supplied electricity and co-generated thermal energy directly from a centralised gas-fired electricity generation plant or system and who is reasonably expected to use equal to or more than 10 TJ of gas per year.	Recent technological, market and policy developments mean a business end customer or a group of substantially non-residential end customers occupying premises or nearby premises may be supplied electricity, heating or cooling from a gas-fired plant (co-generation or tri-generation). ActewAGL Distribution encourages innovative, efficient and customer-focused energy services, and promotes gas usage to lower average prices for all customers.

Intermediaries who will fall within the VRB, VRG or DBG tariff category include the following examples.

- A strata body corporate, owners' corporation or building owner who buys gas from an energy retailer to on-supply or on-sell the gas to the residents of the building can request to be on the VRB tariff category (this tariff category does not include the on-supply or on-selling of gas to residents of the building for gas hot water, including residents of hot water in a residential unit where hot water is supplied through a centralised gas-fired hot water system).
- An operator of a large-scale gas-fired co-generation energy system who supplies electricity and thermal energy to principally residential buildings or precincts that uses more than 50 TJ of gas per year can request to be on the VRG tariff category. Operators

<sup>11</sup> As a guide, ActewAGL Distribution will consider a group of end customers to be substantially business end customers where less than 50% (by number of end customers) of the group use energy principally for personal, domestic or household purposes.

of smaller scale systems consuming less than 50 TJ per year can request to be on the VRB tariff category but not the VRG tariff category.

- A gas-fired co-generation owner and operator who supplies electricity and thermal energy to substantially commercial buildings or precincts that uses more than 10 TJ of gas per year can request to be on the DBG tariff.

An example of an intermediary who will not fall within one of the VRG or DBG tariff categories is a gas-fired co-generation owner and operator who supplies electricity and thermal energy to principally commercial buildings or precincts that uses less than 10 TJ of gas per year. This customer can be assigned to a VRI, VRB, VBS or VBM tariff category.

### 12.7.6 Initial tariff assignment process

ActewAGL Distribution proposes to transition customers on reference services under the 2010-15 access arrangement to the tariff categories in the 2016-21 access arrangement as follows:

- all Tariff Service customers under the 2010-15 access arrangement will be automatically defaulted to the VRI tariff category in the 2016-21 access arrangement;
- all customers on a Capacity Reservation Service or Managed Capacity Service under the 2010-15 access arrangement will be automatically defaulted to the DBC tariff category in the 2016-21 access arrangement; and
- all customers on a Throughput Service under the 2010-15 access arrangement will be automatically defaulted to the DBT tariff category in the 2016-21 access arrangement,

unless the customer's retailer nominates a different tariff category and ActewAGL Distribution agrees the customer is eligible for that tariff category.

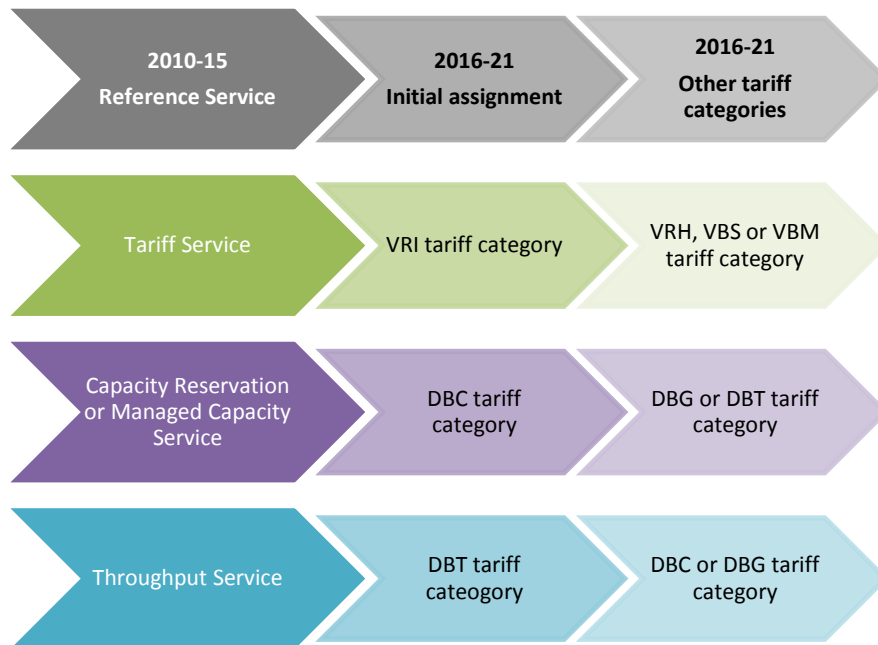
The purpose of this initial tariff assignment process is to transition customers from the tariffs under the 2010-15 reference services to the tariff under the 2016-21 tariff categories in a manner which, to support the pricing objectives set out in section 0:

- minimises the customer billing impacts; and
- enables customers to respond to the 2016/17 tariffs by requesting assignment to another tariff category through their retailer.

To minimise the customer billing impacts, the 2016/17 tariffs for the VRI, DBC and DBT tariff categories have been designed to be similar to the 2015/16 tariffs for the Tariff Service, Capacity Reservation Service and Managed Capacity Service, and Throughput Service, respectively.

Figure 12.1 shows the initial tariff category assignment to customers on the 2010-15 reference services and outlines the other tariff categories available to these customers.<sup>12</sup>

**Figure 12.1 Initial tariff category assignment**



To streamline this transitional arrangement, if the network user satisfies certain conditions set out in the reference service agreement, ActewAGL Distribution proposes to offer network users (such as the retailers) the opportunity to:

- bulk transfer customers from the current gas transport services agreements to the reference service agreement which forms part of the 2016-21 access arrangement; and
- seek assignment to the other tariff categories in the 2016-21 access arrangement from the commencement of the 2016-21 access arrangement.

ActewAGL Distribution engaged with retailers on the new reference tariff schedule and the initial tariff assignment process to discuss any impacts which might occur as a result of the proposed changes. Retailers were supportive of the rationale for the changes and the approach to transitioning customers from the 2010-15 access arrangement to the 2016-21 access arrangement.

More information on the bulk transfer and initial tariff assignment process is set out in attachment 14 of this access arrangement information.

<sup>12</sup> The VRB and VRG tariff categories are not available to customers on the 2010-15 reference services due to the nature of the gas connection to the network (e.g. single boundary meter installed at the delivery point or co-generation or tri-generation facility at the delivery point to on-supply principally residential customers).

### 12.7.7 Residential tariff class charge components

Under the 2010-15 access arrangement, all residential customers on a reference service are on a Tariff Service and a Meter Data Service, the charge components for which comprise:

- three fixed charges; and
- banded usage (or 'block') charges (in dollars per GJ).

For the 2016-21 access arrangement, ActewAGL Distribution proposes the charge components of the VRI, VRH and VRB tariff categories within the residential tariff class comprise:

- a single fixed supply charge (in dollars per annum); and
- banded usage (or 'block') charges (in dollars per GJ).

As the VRG tariff category has a similar charge component as the demand customer group tariff categories, information on the VRG tariff category charge components is set out in section 12.7.9.

The full schedule of proposed reference tariffs and charges for 2016/17 is in Schedule 3 of the 2016-21 access arrangement. The proposed charge components are described below.

#### 12.7.7.1 Fixed supply charge

The fixed supply charge is an annual charge that applies to each delivery point. The single charge presents a simplification from the three fixed charges that have applied for each delivery point in the 2010-15 access arrangement period.

The fixed charge is priced to encourage network utilisation but still signals to the customer:

- the fixed-cost nature of natural gas distribution;
- there is a cost to connect customers to the network; and
- the fixed nature of metering costs.

#### VRI tariff category

ActewAGL Distribution proposes to reduce the fixed charge for customers on the VRI tariff category (compared to the fixed charge for existing Tariff market customers under the 2010-15 access arrangement) to encourage:

- new customers to choose gas as their fuel of choice and to install additional gas appliances at the delivery point to have access to the VRH tariff category, which provides for additional price incentives;
- customers who use a small quantity of gas to continue to choose gas as their fuel of choice and to install additional gas appliances at the delivery point to have access to the VRH tariff category, which provides for additional price incentives; and
- retailers to reduce their fixed charges to lower the barriers to access gas for consumers.

This follows feedback at ActewAGL Distribution's consumer engagement sessions that consumers, particularly first time or small gas consumers, do not have a good experience with gas owing to the high fixed charges over periods in which they are consuming minimal quantities of gas (generally spring and summer). In response to the comments from consumers, ActewAGL Distribution explained that its fixed charge for the tariff market customers only comprises around 35 per cent of the total fixed charge on a typical residential customer's retail bill.<sup>13</sup>

ActewAGL Distribution considers that offering a lower fixed charge for these customers will promote the long-term interests of consumers by:

- keeping gas competitive (by encouraging retailers to also lower their fixed charges); and
- encouraging more customers to connect to the network and stay connected to the network.

This will reduce the network charges for all customers over the long term as ActewAGL Distribution's costs can be allocated across a larger customer base.

#### **VRH tariff category**

ActewAGL Distribution proposes to set a lower usage charge but a higher fixed charge (compared to the VRI tariff category) for customers on the VRH tariff category to encourage these customers to:

- install additional gas appliances at the delivery point so that if customers use gas throughout the year, they can benefit from lower usage charges to offset the relatively higher fixed charge, and a lower winter bill; and
- choose additional gas appliances over alternative energy solutions so that ActewAGL Distribution can increase its competitiveness compared to alternative energy sources by offering to lower its usage charges to reduce its customers' total energy costs for each additional gas appliance installed at the delivery point.

ActewAGL Distribution considers this tariff strategy will promote the long-term interest of consumers by:

- keeping gas competitive; and
- encouraging more gas use throughout the year and therefore, the efficient use of the network.

This will lead to lower network charges for all customers over the long term as ActewAGL Distribution recovers most of its costs from usage charges.

---

<sup>13</sup> Based on ActewAGL Distribution's reference tariff schedule in 2014/15 and a standard retail offer for residential customers in the ACT in 2014/15.

### **VRB tariff category**

ActewAGL Distribution proposes to set the charge components of the VRB tariff category to be similar to the VRI tariff category. This is because similar customers should pay similar prices to reflect the costs they impose on the network to support the pricing objectives set out in section 0, to comply with the Rules and address the revenue and pricing principles in the NGL.

ActewAGL Distribution has taken account of:

- the fact that these customers may require less capital and operating expenditure 'behind' (downstream of) the boundary meter. This is primarily the operating and capital savings resulting from reduced demand for individual meters and the need for ActewAGL Distribution to read those meters; and
- the need to build and maintain the same network infrastructure up to the boundary meter to supply the same end customers, and the need for cost recovery equity between those end customers and other end customers on the network (minimising inefficient cross-subsidies between customers).

#### **12.7.7.2 Banded usage charges**

ActewAGL Distribution will continue to charge for consumption based on banded volume throughput charges for the VRI, VRH and VRB tariff categories.

The VRI tariff category will have four blocks that provide lower prices for volumes of gas consumed in the higher blocks to:

- align with the tariff structure for the Tariff Service under the 2010-15 access arrangement; and
- minimise the billing impacts for customers transitioning from the 2010-15 to 2016-21 access arrangement.

The VRH and VRB tariff categories will only have three blocks to minimise the transaction costs for these tariffs but still enable ActewAGL Distribution to set cost reflective tariffs to support the pricing objectives set out in section 0, to comply with the Rules and address the revenue and pricing principles in the NGL. Similar to the VRI tariff category, the blocks will provide lower prices for volume consumed in the higher blocks.

ActewAGL Distribution proposes to continue with blocks that reflect the declining costs of meeting incremental demand. The block sizes have been modified to better reflect the gas consumption patterns of customers using various gas appliances at the delivery point, and the changing mix of residential customers in this market as set out in Tables 12.5 and 12.6.<sup>14</sup>

---

<sup>14</sup> For example, new gas end customers are forecast to use less gas than existing end customers due to the greater availability and affordability of energy-efficient appliances. The ACT Government's indicative land release program also suggests a greater mix of new medium-density and high-rise developments compared to new single dwellings over the 2016-21 access arrangement period.



**Table 12.5 VRI block sizes mapped to typical usage driver for small or first time gas consumers**

Block	Gas usage (GJ per year)	Typical usage driver
1	0 – 15	Residential and home business cooking and/or hot water
2	15 – 161.4	Residential and home business cooking and/or hot water and heating Small business commercial gas appliance(s) or application(s)
3	161.4 – 543.6	Small business commercial gas appliances or applications
4	Above 543.6	Small business commercial gas appliances or applications Medium business commercial or industrial gas appliances or applications

**Table 12.6 VRH block sizes mapped to typical usage driver for gas consumers with gas heating and other gas appliances**

Block	Gas usage (GJ per year)	Typical usage driver
1	0 – 20.4	Residential and home business gas heating and hot water or cooking
2	20.4 – 74.4	Residential and home business gas heating, hot water and cooking
3	Above 74.4	Residential and home business, whole-of-home gas heating, hot water, cooking and other gas appliances.

### VRB tariff category

To support the pricing objectives set out in section 0, comply with the Rules and address the revenue and pricing principles in the NGL, ActewAGL Distribution proposes to set the charge components of the VRB tariff category to be similar to the VRI tariff category. This is because similar customers should pay similar prices to reflect the costs they impose on the network.

The usage charges for the VRB tariff category have been set to be similar to the prices for the first three blocks of customers on a VRI tariff category. The tariffs for the VRB tariff category has been set over three declining blocks rather than four declining blocks to reflect the expectations that larger business customers with higher energy bills will not be on a VRB tariff category and will rather seek their own gas connection in order to access competitive retail offers for gas supply. This means that ActewAGL Distribution expects there will be no customers on the fourth declining block. By setting the tariffs over three blocks, ActewAGL Distribution is minimising the transaction costs for these tariffs.

Customers on the VRB tariff category will be subject to different block sizes to customers on the VRI tariff category to recognise:

- the declining cost of meeting incremental demand; and
- the similar cost of infrastructure to supply gas to these end customers (excluding the differences in metering).

### 12.7.8 Business tariff class charge components

Under the 2010-15 access arrangement, all business end customers (other than major customers) on a reference service are on a Tariff Service and a Meter Data Service, the charge components for which comprise:

- three fixed charges; and
- banded usage (or 'block') charges (in dollars per GJ).

For the 2016-21 access arrangement, ActewAGL Distribution proposes the charge components of the VBS and VBM tariff categories within the business tariff class comprise:

- a fixed supply charge (in dollars per annum); and
- banded usage (or 'block') charges (in dollars per GJ)

As the DBC, DBT and DBG tariff categories have a different charge structure to the VBS and VBM tariff categories, information on the DBC, DBT and DBG tariff category charge components is set out in section 12.7.9.

The full schedule of proposed reference tariffs and charges for 2016/17 is in Schedule 3 of the 2016-21 access arrangement proposal. The proposed charge components are explained below.

#### 12.7.8.1 Fixed supply charge

The fixed supply charge is an annual charge that applies to each delivery point. The single charge presents a simplification from the three fixed charges that have applied for each delivery point in the 2010-15 access arrangement period.

The fixed charge is priced to encourage network utilisation but still signals to the customer:

- the fixed cost nature of natural gas distribution;
- there is a cost to connect customers to the network; and
- the fixed nature of metering costs.

ActewAGL Distribution proposes the VBS tariff category will have a lower usage charge but a higher fixed charge (compared to the VRI tariff category) to encourage small business customers to install commercial gas appliances and applications at the delivery point to use gas on the network throughout the year rather than solely during winter.

ActewAGL Distribution proposes a higher fixed charge for the VBM tariff category (compared to the VBS tariff category) to reflect the higher infrastructure costs, including metering, for these customers.

### 12.7.8.2 Banded usage charges

ActewAGL Distribution will continue to charge for consumption based on banded volume throughput charges for the VBS and VBM tariff categories.

ActewAGL Distribution has proposed the VBM tariff category to support the pricing objectives set out in section 0 that similar customers should pay prices which reflect the costs they impose on the network. The VBM tariff category has been designed to address a perverse pricing incentive where under the 2010-15 access arrangement tariff structure, customers who increased their gas usage above 10TJ of gas per year could be assigned to the contract market tariff class and experience a significant price reduction despite the increase in their gas capacity requirements. The VBM tariff category will create a smooth transition in price between customers using less than or more than 10 TJ of gas per year to reduce this price disparity. ActewAGL Distribution has also proposed to introduce new capacity blocks for customers on a capacity-based charge to reduce this price disparity.<sup>15</sup>

To support the pricing objectives set out in section 0, comply with the Rules and address the revenue and pricing principles in the NGL, the VBS and VBM tariff categories will have three blocks to minimise the transaction costs for these tariffs while still enabling ActewAGL Distribution to set cost-reflective tariffs. The blocks will provide lower prices for volume consumed in higher blocks.

By offering lower usage charges for the VBS tariff category (compared to the VRI tariff category) and for the VBM tariff category (compared to the VBS tariff category), ActewAGL Distribution can increase its competitiveness compared to alternative energy sources by reducing the gas network part of energy costs for each commercial and industrial gas appliance or application installed at the delivery point.

ActewAGL Distribution considers this tariff strategy will promote the long-term interest of consumers by:

- keeping gas competitive; and
- encouraging business customers to use more gas throughout the year and therefore, the efficient use of the network.

This will lead to lower network charges for all customers over the long term as ActewAGL Distribution recovers most of its costs from usage charges.

ActewAGL Distribution proposes to continue with blocks that reflect the declining costs of meeting incremental demand. The block sizes have been modified to better reflect the gas consumption patterns of customers using various gas appliances or applications at the delivery point as set out in Tables 12.7 and 12.8.

---

<sup>15</sup> For information on the new capacity blocks for these customers, please refer to section 12.7.9.2.

**Table 12.7 VBS block sizes mapped to typical usage driver for business gas consumers**

Block	Gas usage (GJ per year)	Typical usage driver
1	0 – 30	Home business gas heating, hot water and/or cooking Small business commercial gas appliances or applications (e.g. commercial gas cooking)
2	30 – 1140	Small business commercial gas appliances or applications (e.g. commercial gas washing machines and dryers)
3	Above 1140	Small business commercial or industrial gas appliances or applications

**Table 12.8 VBM block sizes mapped to typical usage driver for business gas consumers**

Block	Gas usage (GJ per year)	Typical usage driver
1	0 – 4200	Small business commercial or industrial gas appliances or applications Medium business commercial or industrial gas appliance(s) or application(s)
2	4200 – 4800	Medium business commercial or industrial gas appliances or applications
3	Above 4800	Medium business commercial or industrial gas appliances or applications

### 12.7.9 VRG, DBC, DBT and DBG tariff category charge components

The 2010-15 access arrangement sets out five reference services for customers who are reasonably expected to use more than 10 TJ of gas per year:

- a) Capacity Reservation Service and Meter Data Service;
- b) Managed Capacity Service and Meter Data Service;
- c) Throughput Service and Meter Data Service; and
- d) Multiple Delivery Point Service.

The charge components for the Meter Data Service and either the Capacity Reservation Service or Managed Capacity Service include:

- three fixed charges which vary depending on the type of meter and the number of delivery stations installed at the delivery point;
- a single capacity charge, which is calculated on the contracted maximum daily quantity at the delivery point;
- overrun charges for any gas consumption in excess of their contracted maximum daily quantity at the delivery point on any day;

- gas balancing charges; and
- short-term capacity charges (for customers who are reasonably expected to use less than 30 TJ of gas per year).

The charge components for the Meter Data Service and Throughput Service includes:

- three fixed charges which vary depending on the type of meter and the number of delivery stations installed at the delivery point;
- one usage charge based on the quantity of gas used at the delivery point; and
- gas balancing charges.

The Multiple Delivery Point Service applies to network users with multiple major customers on a Meter Data Service and either a Capacity Reservation Service, Managed Capacity Service or Throughput Service.

For the 2016-21 access arrangement, ActewAGL Distribution proposes the charge components of:

- the DBC and DBG tariff categories which comprise:
  - a fixed charge to reflect the different meter set capabilities at the delivery point; and
  - banded capacity (or 'capacity block') charges (in dollars per GJ of chargeable demand);
- the VRG tariff category which comprises:
  - a single fixed charge (in dollars per annum); and
  - banded capacity (or 'capacity block') charges (in dollars per GJ of chargeable demand); and
- the DBT tariff category which comprises:
  - a fixed charge to reflect the different meter set capabilities at the delivery point; and
  - one usage charge based on the quantity of gas used at the delivery point.

The full schedule of proposed reference tariffs and charges for 2016/17 is in Schedule 3 of the 2016-21 access arrangement proposal.

#### **12.7.9.1 Fixed supply charge**

The fixed supply charge is an annual charge that applies to each delivery station installed at the delivery point. The single charge presents a simplification from the three fixed charges that have applied for each delivery point in the 2010-15 access arrangement period to minimise the transaction costs for these tariffs.

The fixed charge is priced to encourage network utilisation but still signals to the customer:

- the fixed cost nature of natural gas distribution; and
- the higher infrastructure costs, including metering, for these customers.

For the 2016-21 access arrangement, ActewAGL Distribution proposes to move from fixed charges which refer to a specific meter type to fixed charges associated with the contracted maximum hourly quantity requirements of each delivery station at the delivery point.

ActewAGL Distribution considers this will:

- simplify the fixed charges for customers (customers are more likely to know their contracted maximum hourly requirements rather than the meter type installed at the delivery point);
- provide better pricing signals to customers on the costs for ActewAGL Distribution to provide basic metering equipment and other services relating to the infrastructure at the delivery point, particularly to customers with higher contracted maximum hourly quantity requirements; and
- provide more flexibility for ActewAGL Distribution to offer a suite of basic metering equipment options for customers, rather than the meter types set out in the reference tariff schedule.

#### **12.7.9.2 Banded capacity charges for the DBC, DBG and VRG tariff categories**

For the DBC, DBG and VRG tariff categories, ActewAGL Distribution proposes to charge for consumption based on three banded capacity blocks, where the blocks will provide lower prices for capacity booked in the higher blocks.

As mentioned in section 12.7.8.2, there is a currently a perverse pricing incentive for customers who use slightly more or less than 10 TJ of gas per year. To support the pricing objectives set out in section 0 that similar customers should pay prices which reflect the costs they impose on the network, ActewAGL Distribution proposes to modify the capacity block structure by adding two new blocks. This will enable ActewAGL Distribution to comply with the Rules and address the revenue and pricing principles, by setting efficient prices for similar customers and ensuring that customers moving from the VBM tariff category to DBC or DBT tariff categories continue to be charged prices that reflect the costs these customers impose on the network.

The tariff strategy will also encourage customers to choose to install multiple commercial gas appliances or applications at the delivery point rather than an alternative energy application as the blocks reflect the declining costs of meeting incremental demand.

#### **Chargeable Demand**

ActewAGL Distribution proposes to simplify its three charge components for a customer's capacity requirements into a single charge based on the customer's chargeable demand to minimise the transaction costs for these tariffs.

The charge components in the 2010-15 access arrangement are:

- a) a capacity charge that is based on the contracted maximum daily quantity at the delivery point which can be retrospectively adjusted;
- b) overrun charges for exceeding the contracted maximum daily quantity at the delivery point on any day (summer tranches, additional tranches, short-term capacity charges); and
- c) a short-term capacity-based charge for customers who are reasonably expected to use less than 30 TJ of gas per year.

For the 2016-21 access arrangement, the chargeable demand will be adjusted on a forward-looking basis and determined as the greater of:

- a) the contracted maximum daily quantity at the delivery point;
- b) 10 times the contracted maximum hourly quantity at the delivery point; or
- c) the ninth-highest daily gas consumption at the customer's delivery point over a rolling 12-month period.

ActewAGL Distribution considers a chargeable demand-based charge achieves the right balance between:

- streamlining the process for network users to seek additional capacity for their customers to minimise the transaction costs for these tariffs;
- providing appropriate price signals to customers to respond by ensuring customers appropriately pay for the capacity they use on ActewAGL Distribution's network; and
- ensuring customers are not immediately charged for consuming gas in excess of their contracted capacity entitlements at the delivery point.

The chargeable demand has been designed to increase by the ninth-highest daily gas consumption over a rolling 12-month period rather than the first, second, third, etc. highest daily gas consumption to:

- recognise that customers may occasionally take gas in excess of their contracted capacity at the delivery point;
- recognise that customers should not be immediately charged for taking this excess gas unless there is insufficient capacity on the network for this excess gas and this action causes damage to the network and/or causes supply issues to other customers on the network;
- ensure customers pay for a reasonable portion of the gas network capacity they are using; and
- promote the efficient use of the network.

During ActewAGL Distribution's engagement sessions, retailers advised ActewAGL Distribution that they supported the proposal to move to a chargeable demand-based charge. This is because

this approach is consistent with JGN's approach, which has been approved by the AER,<sup>16</sup> and will provide a harmonised approach for customers and network users in the ACT and NSW.

Furthermore, this streamlined approach would lower the administrative cost and time for the parties to manage a customer's gas capacity requirements on the network, which can be passed onto customers as cost savings.

During ActewAGL Distribution's engagement sessions, major customers advised ActewAGL Distribution that:

- the overrun charges acted as a penalty for exceeding their contracted maximum daily quantity at the delivery point; and
- as a result, they took steps to avoid these charges by reducing their daily gas consumption.

ActewAGL Distribution considers that customers should be able to request additional capacity on the network if there is sufficient capacity on the network for these customers to use more gas and they are prepared to pay for this additional capacity on an ongoing basis. This will allow ActewAGL Distribution to promote the efficient use of the network over the long term through appropriate price signals to these customers.

Further information on chargeable demand can be found in attachment 14 of this access arrangement information.

The block sizes have been created to reflect the gas consumption patterns of the major customers, and are set out in Tables 12.9, 12.10 and 12.11.

**Table 12.9 DBC capacity block sizes mapped to typical usage driver for major customers**

Block	Capacity based on GJ of chargeable demand per annum	Typical usage driver
1	0 – 50	Small major customers
2	50 – 100	Larger major customers
3	Above 100	Larger major customers

<sup>16</sup> AER 2010, *Access Arrangement final decision – Jemena Gas Networks (NSW) Ltd 2010-2015*, June; AER 2015, *Access Arrangement final decision – Jemena Gas Networks (NSW) Ltd 2015-2020*, June.



**Table 12.10 DBG block sizes mapped to typical usage driver**

Block	Capacity based on GJ of chargeable demand per annum	Typical usage driver
1	0 – 40	Small co-generation or tri-generation facility
2	40 – 80	Large co-generation or tri-generation facility
3	Above 80	Large co-generation or tri-generation facility

**Table 12.11 VRG block sizes mapped to typical usage drivers**

Block	Capacity based on GJ of chargeable Demand per annum	Typical usage driver
1	0 – 50	Small co-generation or tri-generation facility supplying energy to a small residential complex
2	50 – 100	Large co-generation or tri-generation facility supplying energy to a residential precinct
3	Above 100	Large co-generation or tri-generation facility supplying energy to a residential precinct

### 12.7.9.3 Single usage charge for DBT tariff category

For the DBT tariff category, ActewAGL Distribution proposes to continue offering a single usage charge, similar to the tariff for the Throughput Service under the 2010-15 access arrangement to minimise the transaction costs for this tariff. This tariff category is designed for first-time major-customer gas users or major customers with intermittent gas consumption.

### 12.7.10 Charges for ancillary activities

ActewAGL Distribution's proposed ancillary charges seek to recover the cost of network user-initiated activities. The network user-requested ancillary activities which attract an ancillary charge are set out in attachment 2 of this access arrangement information.

For the 2016-21 access arrangement, ActewAGL Distribution proposes to change the ancillary charges in the 2010-15 access arrangement as follows:

- **set the ancillary charges to recover its incremental costs** of providing the relevant activities in order to minimise the risk that other customers are inefficiently cross-subsidising the costs of these network user-requested activities;
- **introduce a new ancillary charge for decommissioning and meter removals** to recognise that this activity is more costly than a disconnection; and
- **set different ancillary charges for customers with less than or greater than 6m<sup>3</sup>/hr meter sets** to recognise the higher cost of performing ancillary activities for customers with the larger meters and to avoid cost cross-subsidisation between customers.

ActewAGL Distribution proposes to reduce the current prices charged for special meter reads to reflect the increased volumes for this activity (including due to the introduction of the National Energy Customer Framework in 2012 which requires more frequent special meter reads to facilitate customer churns and transfers), which has lowered the incremental costs of providing these activities.<sup>17</sup> ActewAGL Distribution considers that lowering the charge for special meter reads will improve customer participation in the energy market.

ActewAGL Distribution's proposed decommissioning and meter removal charge reflects the costs of disconnecting and removing the gas metering equipment from the customer's delivery point, as well as disconnecting the gas service from the gas main. These activities can involve accessing the plastic or steel mains by saw-cutting the road and digging down to the gas main, disconnecting the gas service from the gas main by cutting the gas service and capping the stub, backfilling the excavated site and making a temporary restoration. Any of these activities may also require traffic management.

### ***12.8 Allocation of revenue to services***

Rule 93(1) requires total revenue is to be allocated between reference and other services in the ratio in which costs are allocated between reference and other services.

For the 2016-21 access arrangement, ActewAGL Distribution proposes a single reference service—the haulage reference service. ActewAGL Distribution does not have any customers on non-reference services.<sup>18</sup> As a result, the required cost of service (building blocks) is allocated to the haulage reference service.

### ***12.9 Efficient pricing***

This section outlines the way ActewAGL Distribution's tariffs support allocative efficiency and meet the tariff requirements in the Rules.

It provides:

- demonstration of efficient prices including ActewAGL Distribution's estimates of:
  - standalone and avoidable costs; and
  - long-run marginal costs (LRMC);
- ActewAGL Distribution's consideration of transaction costs; and

---

<sup>17</sup> Under ActewAGL Distribution's current gas transport services agreements, a discounted special meter read charge applies in a calendar month where there are more than 1,500 special meter read requests in that calendar month. ActewAGL Distribution has forecast more than 2,000 special meter read requests a month over the 2016-2021 access arrangement period. As a result, the proposed ancillary charge for the special meter read activity in the 2016-2021 access arrangement is similar to this discounted charge.

<sup>18</sup> ActewAGL Distribution offers two non-reference services: (a) negotiated services; and (b) interconnection of embedded network services.

- ActewAGL Distribution's consideration of its customers' ability to respond to price signals.

### 12.9.1 The efficiency measures

#### 12.9.1.1 Standalone and avoidable costs

Rule 94(3) requires that the expected revenue recovered for each tariff class should lie on or between the standalone cost of providing the reference service and the avoidable cost of not providing the reference service.

ActewAGL Distribution's standalone and avoidable cost estimates for each tariff class and the approach to calculating these are contained in a report prepared for ActewAGL Distribution by HoustonKemp. The report is provided as appendix 12.02 of this attachment. The estimates are provided in table 12.12 below. The report and table 12.12 demonstrate that ActewAGL Distribution's expected revenue for each tariff class lies between the two efficiency measures.

**Table 12.12 ActewAGL Distribution's standalone and avoidable costs and average revenue**

Tariff Class	2016/17	2017/18	2018/19	2019/20	2020/21	Compliance check?
<b>Residential \$/GJ in nominal terms</b>						
Standalone cost	13.16	13.45	14.54	15.82	16.62	Compliant
Avoidable cost	4.20	4.26	4.61	4.82	5.25	Compliant
Average revenue	11.52	11.98	12.43	12.89	13.36	Compliant
<b>Business \$/GJ in nominal terms</b>						
Standalone cost	17.14	17.15	18.07	19.60	19.97	Compliant
Avoidable cost	1.19	1.21	1.30	1.36	1.48	Compliant
Average revenue	5.14	5.27	5.40	5.61	5.81	Compliant

#### 12.9.1.2 Long run marginal cost

Rule 94(4) requires the distribution network service provider to take into account the long run marginal cost (LRMC) in setting tariffs.

The LRMC is an estimate of future costs that would be caused by an incremental change in demand. These costs include the costs of expanding the capacity of the network to satisfy incremental change in demand and the associated operation and maintenance of the augmentation.

ActewAGL Distribution has estimated the LRMC for each tariff class using the average incremental approach. Information on the approach used to estimate the LRMC is contained in HoustonKemp's report in appendix 12.02 of this attachment.

The LRMC driven by forecast gas consumption of the network is undefined as gas consumption is forecast to decline over the foreseeable future, and the LRMC associated with forecast growth in customer numbers and forecast peak demand on the network has been estimated based on the \$/connection/annum. The estimated LRMC is set out in table 12.13.

**Table 12.13** ActewAGL Distribution's LRMC by tariff component

Cost	Annual cost
LRMC Energy Consumption (\$/GJ)	Undefined
LRMC residential tariff class (\$/connection/annum)	459.79
LRMC business tariff class (\$/connection/annum)	460.59

### Taking LRMC into account

ActewAGL Distribution considers this LRMC is an upper bound that might apply to a new customer's fixed charge. However, as this LRMC includes network capacity development for existing and new customers to meet forecast peak demand on the network, part of the LRMC could be apportioned to a capacity-based charge. A capacity-based charge might be more appropriate to provide customers with price signals on the costs to provide network services during peak gas usage on the network. However, given customers' usage is not recorded in time increments (as most of ActewAGL Distribution's customers have basic metering equipment installed at their premises which are read quarterly or monthly), the LRMC per connection could instead be appropriately apportioned to customers' usage charges as a proxy for peak demand.

Factors applicable to the consideration of LRMC for gas network pricing, and which explain the reasons LRMC estimates are not equivalent to ActewAGL Distribution's tariff levels, are as follows.

- The Rules permit ActewAGL Distribution to recover its building block cost of services, which includes a return on sunk costs (i.e. the regulatory asset base) and operating expenditure, and can therefore be expected to be different to the LRMC, as acknowledged by Rule 94(5).
- Customers advised ActewAGL Distribution that they prefer for ActewAGL Distribution to minimise its fixed charge as customers see fixed charges as a barrier to gas connection and small gas consumers, particularly over the periods in which consumers use minimal quantities of gas.
- The LRMC estimates are sensitive to assumptions and the quality of input information.
- ActewAGL Distribution needs to ensure that natural gas, as a discretionary fuel, remains competitive. Keeping fixed charges low for first time gas consumers helps to keep gas competitive.
- ActewAGL Distribution's customers indicated that they valued price stability. ActewAGL Distribution notes that the LRMC estimates can be volatile when reassessed over time.

Gas networks are very different from electricity distribution businesses, which must, under the National Electricity Rules, base their tariffs on LPMC. This is because electricity distribution businesses' capacity requirements are primarily driven by peak demand. Gas, and in particular ActewAGL Distribution's gas network, faces competition from other fuel sources as gas is a discretionary fuel in the ACT and NSW. In addition, climate is a significant determinant of the customer mix and utilisation of the network. These factors affect the application of the LPMC to signal the impact of incremental changes in demand.

ActewAGL Distribution notes that its network does not experience capacity constraints to the same extent as some electricity networks. ActewAGL Distribution has capacity to provide additional gas network services to customers, particularly over the summer and spring period where there is currently low gas consumption. For this reason, ActewAGL Distribution is not subject to the same incentives to price its usage or fixed charges at the LPMC and can better promote the NGO by setting its tariffs to be more cost reflective and by enabling customers to respond to these tariffs to encourage the efficient use and growth of the network.

ActewAGL Distribution has demonstrated this by taking into account its customer preferences for:

- lower usage charges in the VRH, VBS and VBM tariff categories to encourage gas consumption throughout the year through the uptake of multiple gas appliances and commercial gas appliances and applications at a delivery point, rather than solely for heating; and
- lower fixed charges in the VRI tariff category to encourage customers to connect to gas and stay connected to gas as their fuel of choice.

### **12.9.1.3 Transaction costs**

Rule 94(2)(b) requires each tariff class to be constituted with regard to the need to avoid unnecessary transaction costs. It also requires that a tariff, and each charging parameter for a tariff class, be determined with regard to the transaction costs associated with the tariff or each charging parameter.

ActewAGL Distribution has considered transaction costs such as metering charges and administrative costs when determining its tariff classes and charge components. This includes establishing an appropriate balance of transaction costs that supports ActewAGL Distribution's pricing objectives set out in section 0 and is consistent with the revenue and pricing principles and the Rules.

ActewAGL Distribution considers that its decision to move to a tariff structure that targets different customer segments is economically efficient for a number of reasons. For example, it would be inefficient to charge individually metered customers consuming less than 10 TJ a year on a capacity-based charge as this would require more sophisticated daily metering and data handling. Such metering costs are avoided by charging these customers on usage, using basic metering equipment.

ActewAGL Distribution also believes the one-off administrative cost to change the tariff structure (the tariff categories referred to in section 12.7.5) is justified on the basis that it will encourage new connections and consumption decisions which will promote the efficient use and growth of the network and will lead to lower network charges for all customers over the long term.

This is because the tariff structure has been designed to encourage, through appropriate price incentives:

- new customers to connect to the network and stay connected to the network, which will lead to lower network charges for all customers over the long term as ActewAGL Distribution's costs (which are mainly fixed costs) can be allocated across a larger customer base;
- existing customers to use gas throughout the year by encouraging these customers to install multiple gas appliances or commercial gas appliances and applications, rather than solely gas heating at the delivery point, which will lead to lower network charges for all customers over the long term (as ActewAGL Distribution recovers most of its costs through its usage charges), and will promote the efficient use of the network (as most of the gas is currently consumed on ActewAGL Distribution's network during winter); and
- emerging markets, particularly base load gas users to connect to the network, which will lead to lower network charges for all customers over the long term as ActewAGL Distribution's cost can be allocated across a larger customer base, and will promote the efficient use and growth of the network (as these customers generally have a flat consumption profile and will pay for their own connection to the network).

To ensure the implementation of these changes does not cause retailers unreasonable administrative burden and costs, which may be passed onto customers, and to reduce any administrative burden and costs currently experienced by retailers, ActewAGL Distribution has:

- consulted early and extensively with retailers on the tariff structure and transitional arrangements from the 2010-15 access arrangement to the 2016-21 access arrangement; and
- streamlined the process for major customers to seek additional gas capacity on the network by moving to a chargeable demand-based charge, which harmonises with the approach adopted by JGN in NSW.

ActewAGL Distribution's simplified reference services and move to a chargeable demand-based charge will also avoid transaction costs associated with having multiple fixed charge components for each tariff category and a complex tariff charge component structure. The simplified reference service will improve customer understanding of ActewAGL Distribution's charges and improve participation in energy markets, including reducing the administrative costs and complexity of retail comparison websites. By moving to a chargeable demand-based charge, ActewAGL Distribution has streamlined the process for major customers to seek additional gas capacity and simplified the charge components of the tariffs.

ActewAGL Distribution considers that its proposed tariffs and tariff classes for the 2016-2021 access arrangement period provide the appropriate balance between minimising transaction costs and ensuring that customers have incentives to respond to pricing signals.

#### **12.9.1.4 Response to price signals**

Rule 94(4)(b)(ii) requires that where a tariff consists of two or more charging parameters, each parameter for a tariff class must be determined having regard to whether the customers belonging to the relevant tariff class are able or likely to respond to price signals.

ActewAGL Distribution considers that it has structured its tariffs and charging components to allow customers and end customers to respond to price signals.

ActewAGL Distribution's proposed approach to lower the usage charges for the VRH, VBS and VBM tariff categories will encourage customers to respond to the tariffs through reduced total energy costs for each additional gas appliances or commercial gas appliance or application installed at the delivery point.

This is because:

- these customers can benefit from lower usage charges to offset the relatively higher fixed charge, and a lower winter bill; and
- ActewAGL Distribution can increase its competitiveness compared to alternative energy sources, by offering to lower its usage charges to help reduce a customer's total energy costs for each additional gas appliance installed at the delivery point.

ActewAGL Distribution considers that this is an appropriate price signal for customers where the marginal costs of supplying additional units is materially lower than the average costs, encouraging increased network utilisation.

ActewAGL Distribution's proposed approach to lower the fixed charge for the VRI tariff category will encourage customers to connect to gas and stay connected to gas by keeping gas competitive compared to alternative energy sources.

#### ***List of appendices to this attachment***

Appendix 12.01 ActewAGL Distribution's Tariff Structure Statement

Appendix 12.02 HoustonKemp, 2015, Cost of Service Model - a report for ActewAGL Distribution

### *Abbreviations uses in this document*

<b>Abbreviation</b>	<b>Full term</b>
<b>ACT</b>	Australian Capital Territory
<b>AER</b>	Australian Energy Regulator
<b>DBC</b>	Demand Business Capacity tariff category
<b>DBG</b>	Demand Business Large Scale Generation for business end customers tariff category
<b>DBT</b>	Demand Business Throughput tariff category
<b>ELMS</b>	Emergency Load Management Systems
<b>GJ</b>	gigajoule(s)
<b>JGN</b>	Jemena Gas Networks (NSW) Ltd
<b>LRMC</b>	long-run marginal cost
<b>NERL</b>	National Energy Retail Law
<b>NGL</b>	National Gas Law
<b>NGO</b>	National Gas Objective
<b>NSW</b>	New South Wales
<b>RPP</b>	revenue and pricing principles
<b>Rules, the</b>	National Gas Rules
<b>TJ</b>	terajoule(s)
<b>VBM</b>	Volume Medium Business tariff category
<b>VBS</b>	Volume Small Business tariff category
<b>VRB</b>	Volume Residential Boundary tariff category
<b>VRG</b>	Volume Residential Large Scale Generation for residential end customers tariff category
<b>VRH</b>	Volume Residential Individual (gas heating and other gas appliances)
<b>VRI</b>	Volume Residential Individual tariff category