

# Gas Distribution Code of Practice - Submission by John Godfrey

[Introduction](#)

[Key Point - Gas Abolishment](#)

[Summary of Changes](#)

[My Background](#)

[List of Proposed Changes with Comments](#)

[Gas Distribution Code of Practice v15 with proposed changes](#)

## Introduction

Thank you for the opportunity to contribute to the review of the Gas Distribution System Code of Practice, v15.

I have marked up a version of the document with some suggested changes and that is in the appendix. I list all of the changes below with some explanations.

## Key Point - Gas Abolishment

The key point is regarding gas abolishment. I am concerned that the current gas abolishment method is actually less safe than a cheaper approach.

In this section I use the term abolishment for where gas is no longer planned to be reconnected to a property. So the meter will be removed as a minimum.

The current approach that is deemed to be 'safest' is to remove the gas line from the property back to the nearby main distribution pipe. This is expensive as it often involves digging up the road etc. Importantly, in order to dig up and remove the property line, it must first be sealed off from the main. So abolishment is a 3 step process.

1. Disconnect house and remove meter at property end.
2. Disconnect property line from the upstream distribution main.
3. Remove the property line back to the main.

In a standalone sense, completing all 3 steps is 'cleanest' and avoids confusion. The problem is that by requiring step 3 (which is expensive), people are avoiding step 2, and this is systemically less safe for Victorians. This leads to unsafe situations where people artificially disconnect (by telling the gas retailer they're moving house) and thus avoiding on-going fees.

The regulators therefore need to ensure that this code explicitly allows for voluntary disconnection and caps the fee to just a nominal fee to avoid promoting unsafe acts.

See <https://www.facebook.com/hashtag/gasmeterabolishmentdisconnection> for more examples of what's going on.

There are millions of gas connections. Customers are well aware that it is much cheaper to just have the meter removed, i.e. step 1. With the meter removed, which can be done by a licensed plumber, the customer can avoid paying any further bills. However the gas line up to the meter from the local distribution main is still 'live'.

I understand that renovations, landscaping etc mean about 3000 instances a year of 'hits' on live gas lines left by just doing Step 1. The current regulations are driving this behaviour.

Regulations that financially reward less safe behaviour are dangerous.

I propose instead that the abolishment fee just cover the costs of steps 1 & 2. These costs will be much lower than what is needed to cover step 3 as well. If the cost to the customer is kept equivalent to the cost of step 1, then step 2 is much more likely to occur. The additional expense for step 2 can be distributed across residential utility customers.

Unfortunately, if the Step 2 expense is absorbed into the fixed fee charge out to the remaining gas customers, this will penalise people who can't afford the upfront cost of electrification.

Another way is instead to spread the cost by absorbing it into the fixed fee charge out to non-industrial electricity customers. (This may require a government body like the ESC to act as intermediary for the transfer of funds.)

From the ESC Dashboard for 2Q2022

	Elec	Gas
Residential	2,665,052	2,077,407
Small business	<u>236,290</u>	<u>52,089</u>
Total	2,901,342	2,129,496

If Step 2 cost on average \$300, distributing this cost would cost an electricity customer an extra cent per 100 disconnections. This is "noise" relative to the variable costs of electricity.

A way of justifying this is that absorbing the current gas supplied energy demand into the electricity grid will require some strengthening of the electricity grid.

## Summary of Changes

In summary these proposed changes have the following objectives:

1. Create an explicit maximum disconnection / abolishment charge for Tariff V customers. I've suggested a nominal A\$50. I understand it not being "free" as there should be some small barrier to nuisance requests. However, disconnection fees should not be set so high so as to discourage disconnections. This leads to unsafe situations where people artificially disconnect (by telling the gas retailer they're moving house) and thus avoiding on-going fees. See above.
2. Clarify that Distributors have an obligation to take greenhouse gas emission reporting and mitigation seriously. You can't manage what you don't measure. Distributors (& the ESC) need to get a better handle on what the fugitive emissions really are so that they can be

managed and reduced.

3. Move Tariff V (ie residential / small business customers) to paying their connection fees upfront (like electricity). Making the connection cost explicit and upfront will make it clearer that gas connections are now discretionary and voluntary.
4. Reduce the 'metering' portion of UAFG by enabling moving to 'zonal' use of HHV through increased datalogging.  
As gas increasingly comes from multiple sources (and heaven forbid starts to wastefully include deliberate addition of hydrogen) then UAFG metering errors will increase if the system continues to rely on a single statewide HHV. Increased UAFG metering errors will obfuscate fugitive emissions. Reducing UAFG metering errors will make the fugitive emissions easier to "see" and also isolate. (I'm not saying it will ever be 'easy'.)  
I've also been told that replacement of the LP network with HP networks over the years is increasing the measurement portion of UAFG as the gas is being delivered at a lower temperature (and hence higher energy) than that assumed at billing because of the cooling effect of pressure reduction from the HP mains closer to the customer's meter. A comprehensive study monitoring gas temperatures at customer meters would determine the magnitude of this element of UAFG.

## My Background

I am a retired chemical engineer. I worked for a major oil company for 37 years. After starting at a refinery in Adelaide then worked in Melbourne, New Zealand, the USA and Europe. My career involved roles covering the Asia Pacific and the company's global refining interests.

Of particular relevance to this submission is that I was for a time the Energy Team Lead at a Victorian refinery. This involved detailed energy analysis of a complex fuel system that included gaseous fuels (mainly methane and hydrogen) from a mix of sources including "Class A" gas from the Victorian fossil gas system. In that role I used techniques very similar to the UAFG component breakdown that has previously been done for the ESC and the gas distribution companies by Asset Integrity Australasia.

In addition I led the preparation of that refinery's first submission to the National Greenhouse gas Emissions Reporting System (NGERS) of the site's greenhouse gas emissions. I was also involved in reviews of some of the subsequent submissions.

## List of Proposed Changes with Comments

I propose changes to the following sections:

1.4: (Previously not used) GHG Emissions Reporting Requirements

*To make explicit that Gas Distributors are expected to comply with society expectations regarding greenhouse gas emission reporting and reduction.*

2.1.g: Obligation to provide reports

*Allows the ESC to seek information to assure compliance.*

#### 2.3.d: Maintenance work status reports

*Public money is allocated to these programs, so the ESC needs to ensure stewardship.*

#### 2.4 b,c,d: Creating a formal link between UAFG, fugitive emissions and NGERs reporting of GHG emissions

*These three clauses work together to validate that the NGER reported data best reflects actual emissions as estimated from the UAFG work. Currently the Distributors report to NGER based on high level correlation factors from the American Petroleum Institute. The Distributors themselves admit that NGER reported numbers done this way have no correlation to the UAFG based estimation of fugitive emissions. Given that the Victorian Gov Emissions Reduction legislation relies on NGER data for tracking progress towards emissions reduction targets, the linkage to UAFG needs to be made explicitly.*

#### 3.1.e: Include the need to provide installation charges to the customer

*Need to tell the customer what the connection fee will be.*

#### 4.1.d,e: Set disconnection charges for Tariff V & D customers respectively

*Given that Tariff V customer connection fees have to date been calculated on a cost - revenue approach with a NPV life of 20 years, and that the average connection time for Tariff V customer will be well over that, it seems unreasonable to charge more than a nominal amount to disconnect a Tariff V customer.*

*For large industrial customers, the disconnection fee should be on an 'as costs' basis.*

#### 13.1: Modify glossary definition of "data logger" to allow for a wider range of instruments that will support more local HHV values and better temperature monitoring.

*Adjusted definition to allow deployment of composition and temperature related data collection at points across the network. This will enable better estimation of the HHV of gas delivered to specific customers. This is important with gas coming from different suppliers, and will become more important if gas blends are allowed.*

*Replacement of the LP network with HP networks over the years is increasing the UAFG from Measurement sources as the gas is being delivered at a lower temperature (and hence higher energy) than that assumed at billing because of the cooling effect of pressure reduction from the HP mains closer to the customer's meter. A comprehensive study monitoring gas temperatures at customer meters would determine the magnitude of this element of UAFG.*

#### Schedule 1 Part D.1: Allow zonal heating values for non-daily metered customers

*Without getting into exactly how this is done, I assume that this clause will change to allow ESC & AEMO to agree 'zones' which group like customers together and that AEMO will monitor and declare flow weighted average HHV values for each zone, as supported by increased deployment of dataloggers to support different HHVs across zones.*

#### Schedule 2 Connection Charges 2,3,4: Have Tariff V customers pay the connection cost up front and eliminate the use of the economic feasibility test.

*Change the cost for connecting to be a simple upfront connection cost (like Electricity).*

*Use the incremental capital cost definition from the current Schedule 2 section 4 e.*

*Remove all complications other than charging Tariff V customers the incremental capital cost of connecting them. No need to factor incremental operating / maintenance costs as these are recovered via the service charge and gas fees.*

Schedule 3: Add reference to ISO 14064. (The ISO 14064 standard provides governments, businesses, regions and other organisations with a complementary set of tools for programs to quantify, monitor, report and verify GHG emissions.)

# Gas Distribution Code of Practice v15 with proposed changes



---

[ESC Logo]

## **GAS DISTRIBUTION SYSTEM CODE OF PRACTICE**

**Version 15 - Effective from 1 March 2022**

Essential Services Commission

Level 8, 570 Bourke Street

Melbourne Vic 3000

Telephone (03) 9032 1300, facsimile (03) 9032 1301

Our reference: *C/22/1785*

**Gas Distribution System Code of Practice 1 March 2022 Version 15**

---

### **1. INTRODUCTION**

**1.1 To whom does the Distribution System Code apply? 1.2**

**What is the purpose of the Distribution System Code? 1.3**

**Commencement and operation**

**1.4 Variation by written agreement**

**1.5 What do italicised words mean?**

**1.6 How is this Code to be interpreted?**

### **2. OPERATION OF DISTRIBUTION SYSTEM**

**2.1 Distributor obligations**

**2.2 Guaranteed Service Levels**

**2.3 Maintenance**

**2.4 Unaccounted for gas**

**3. CONNECTIONS AND AUGMENTATION**

**3.1 Connection Entitlements**

**3.2 Augmentation**

**4. DISCONNECTION AND RECONNECTION**

**4.1 Disconnection**

**4.2 Reconnection**

**4.A Life support equipment**

**5. METERING PROVISIONS**

**5.1 Scope**

**6. PROVISION OF METERING INSTALLATIONS**

**6.1 Provision of metering installations**

**6.2 Type of metering installation**

**6.3 Costs of metering installations**

**6.4 Installation database**

**6.5 Metering installation standards**

**6.6 Security**

**Gas Distribution System Code of Practice 1 March 2022 Version 15**

---

**7. METERING INSTALLATION TESTING**

**7.1 Accreditation and certification**

**7.2 Meter testing**

**7.3 Non-compliant meters**

**7.4 Correction**

**7.5 Sealing and labelling**

**8. METER READING AND DATA**

**8.1 Collection of metering data**

**8.2 Pulse outputs**

**8.3 Access to metering data**

**9. CURTAILMENT**



## **9.1 Curtailment**

## **9.2 Notice of health or safety interruption**

## **9.3 Unplanned interruptions**

## **9.4 Right to information by a customer**

## **9.5 Minimisation of interruption**

## **9.6 Interruption procedures**

## **9.7 Residual Retailer obligations**

# **10. CUSTOMER COMPLAINT HANDLING**

# **11. DEEMED DISTRIBUTION CONTRACT REQUIREMENTS**

## **11.1 Customer obligations**

## **11.2 Distributor obligation**

## **11.3 Liability**

## **11.4 Indemnity**

# **12. OTHER MATTERS**

## **12.1 Customer information**

## **12.2 Distributors permitted to subcontract functions**

## **12.3 Adjustment of network charges**

**Gas Distribution System Code of Practice 1 March 2022 Version 15**

---

# **13. GLOSSARY AND INTERPRETATION**

## **13.1 Glossary**

## **13.2 Principles of interpretation**

**Gas Distribution System Code of Practice 1 March 2022 Version 15**

---

# **1. INTRODUCTION**

## **1.1 To whom does the Gas Distribution System Code of Practice apply?**

This is a Code of Practice that, under section 76(1)(g) of the Essential Services Commission Act 2001, is taken to have been made under Part 6 of that legislation and it applies to gas *Distributors*.

## **1.2 What is the purpose of the Gas Distribution System Code of Practice?**

The purpose of this Code of Practice is to set out the minimum standards for the operation and use of the *distribution system* including requirements for:

- (a) the operation of the *distribution system*;
- (b) *connection and augmentation*;
- (c) disconnection and reconnection;
- (d) provision of *metering installations*;
- (e) *metering installation* testing;
- (f) *meter* reading and data;
- (g) curtailment;
- (h) customer dispute resolution; and
- (i) deemed distribution contract requirements.

### 1.3 Commencement and operation

- (a) The **Gas Distribution System Code of Practice** (version 1) commences on [COMMENCEMENT DATE].

Note: This Code of Practice amends version 14 of the Gas Distribution System Code that was deemed to be a Code of Practice under section 76(1)(g) of the Essential Services Commission Act 2001.

### 1.4 ~~Not used~~ *Greenhouse Gas Emissions Reporting Requirements*

*This Code of Practice is now aligned with the Victorian Climate Change Act 2017 and the National Greenhouse and Energy Reporting Act 2007 (NGER Act).*

*Distributors are expected to report the greenhouse gas emissions from their operations as accurately as possible and to reconcile such reporting with their UAFG reporting.*

## 1.5 What do italicised words mean?

Words and phrases in the *Gas Distribution System Code of Practice* which appear in italics are defined in the glossary at clause 13.1.

## 1.6 Civil penalty requirements

The following clauses of this *Gas Distribution System Code of Practice* are specified as civil penalty requirements for the purpose of the Essential Services Commission Act 2001: 2.2(b), 4A.3(a), 4A.3(b), 4A.3(c), 4A.3(d), 4A.4, 4A.6(a), 4A.7(a), 4A.7(b), 4A.8(a), 4A.8(b), 4A.8(c), 4A.13(a), 4A.13(b).

## 2. OPERATION OF DISTRIBUTION SYSTEM

### 2.1 Distributor obligations

In operating the *distribution system*, a *Distributor* must:

- (a) establish operational and system security standards for its *distribution system* and for all *connections* and proposed *connections* to its *distribution system*;
- (b) maintain the delivery pressure of *gas* from the *distribution system* to ensure the minimum supply pressure is maintained at the outlet of the meter as set out in Schedule 1, Part A to the *Gas Distribution System Code of Practice* to the extent to which it is within its power;
- (c) subject to the *Gas Distribution System Code of Practice*, deliver *gas* received from a *User* at a *transfer point* through its *distribution system* to *distribution supply points* nominated by the *User* on terms and conditions set out in an *Access Arrangement*, or otherwise on fair and reasonable terms and conditions;
- (d) install and maintain *metering installations* and perform meter readings at *basic metering installations* (at least annually) and manage *metering data* in accordance with the metering provisions in clauses 5 to 8 of the *Gas Distribution System Code of Practice*;
- (e) except where the *Distributor* is prevented from so doing by *force majeure*, ensure that *gas* which meets the *prescribed standards of quality* when delivered into the *distribution system* at a *transfer point* also meets the *prescribed standards of quality* (including odorisation) when it is delivered to a *customer* at a *distribution supply point*; and,
- (f) on request by a *customer*, provide (at no charge other than the cost of printing and postage for item 2.1(f)(i)):
  - (i) a copy of the *Distribution System Code* or other regulatory documents relevant to the *customer's* request;

(ii) details as to the *Distributor's* requirements in relation to:

A. the protection of the *Distributor's* equipment; and

B. non-interference by the *customer* with the *Distributor's distribution system* or with the supply to any other *gas installation*;

(iii) an explanation for any non-compliance with clauses 2.1(b) and 2.1d,

within 10 *business days* of the request.

*(g) provide reports to the Essential Service Commission as needed to assure compliance with this act.*

## 2.2 Guaranteed Service Levels

(a) A *Distributor* shall use reasonable endeavours to, at a minimum, meet the *Guaranteed Service Levels* for tariff V *customers*;

(b) Where a *Distributor* does not meet a *Guaranteed Service Level* in relation to a particular tariff V *customer*, the *Distributor* shall ensure that tariff V *customer* is paid the applicable *GSL payment* as soon as practicable.

## 2.3 Maintenance

A *Distributor* must:

(a) use reasonable endeavours to maintain the capability of its *distribution system*;

(b) establish a firm maintenance program for its *distribution system* for the following *year* at least 3 months prior to the commencement of that *year*; and

(c) establish an indicative maintenance program for its *distribution system* for each of the following five *years* following the current firm maintenance program.

*(d) provide a report to the ESC detailing the status of work done and money spent against the firm maintenance program within two months of the completion of the year for the firm maintenance program described in clause 2.3(b)*

## 2.4 Unaccounted for gas

(a) A *Distributor* must use reasonable endeavours to ensure that the quantity of *unaccounted for gas* in its *distribution system* for any *year* as a percentage of the aggregate quantity of *gas* received by the *Distributor* at *transfer points* into its *distribution system* in that *year* is less than the *unaccounted for gas* benchmark set out against its name in Schedule 1, Part C to the *Gas Distribution System Code of Practice*.

- (b) *The Distributor shall use best endeavours to estimate the percentage of UAFG that is likely to be fugitive emissions at least every two years. This percentage estimation should follow industry best practice for reconciliation of uncertain measurements, such as the "Assessment of UAFG between Measurement Elements and Fugitive Emission Elements" conducted previously by Asset Integrity Australasia for the Distributors. These estimates will be reported to the ESC.*
- (c) *The Distributor shall determine their best available estimate of the quantity of UAFG over the NGERs reporting period for each year. This number will likely be an unreconciled estimate and is to be reported as such to the ESC.*
- (d) *The Distributor will each year provide a summary comparing the differences between the greenhouse gas emissions reported to the Federal Government under the NGERs requirements and their UAFG fugitive estimation outlined in clauses 2.4(b) & 2.4(c) for the equivalent period. This shall be provided to the ESC and the Victorian EPA within 2 months of the Distributor's NGERs submission.*

ISO 14064 and associated standards will be used as technical guidance when preparing this summary.

- (e) With respect to clause 2.4(a), a *Distributor* must give written notice to *AEMO* of the volume of gas withdrawn by the *Distributor* for a *customer* for each calendar year. The *Distributor* must give the written notice to *AEMO* within 16 months after the end of the calendar year in which the gas was withdrawn.
- (f) Where the percentage volume of *unaccounted for gas* in a year is different to the *unaccounted for gas benchmark* a *Reconciliation Amount* is payable.

- (i) If the *Reconciliation Amount* is negative, the *Distributor* must pay the *Reconciliation Amount* to the respective *Retailer*.
- (ii) If the *Reconciliation Amount* is positive the *Retailer* must pay the *Reconciliation Amount* to the respective *Distributor*.

### 3. CONNECTIONS AND AUGMENTATION

#### 3.1 Connection Entitlements

- (a) Subject to clauses 3.1(b) and 3.1(c), upon the request of a *customer*, a *Distributor* must connect to its *distribution system* that *customer's gas installation*, provided that:

(i) the *gas installation* at the supply address complies with *regulatory requirements*; (ii) the *customer*:

A. has a contract with the *Distributor* for the haulage of *gas*; or

B. has a contract for the purchase of *gas* with a *Retailer* which has a contract with the *Distributor* for the haulage of *gas*; and

(iii) in respect of a new *connection* the *customer* provides to the *Distributor* upon request a notice of installation, or completion, of *gas installation* work from a *gas installer*.

(b) A *Distributor* must use its best endeavours to connect a *customer's gas installation*:

(i) at a supply address previously supplied by the *Distributor* within one *business day* or within a period agreed with the *customer*; or

(ii) at a new supply address on the date agreed with the *customer* or, where no date is agreed, within 20 *business days*.

(c) A *Distributor* must connect the *gas installation* of a *customer* that resides within the minor or infill extension area on fair and reasonable terms and conditions.

(d) Upon being requested by a *customer* to do so, a *Distributor* must modify the *connection* of the *customer's gas installation* to its *distribution system* within a reasonable time and on fair and reasonable terms and conditions.

(e) A *Distributor* must within 10 *business days* of a request by or on behalf of a *customer*, provide the *customer*, the *customer's agent* or the *customer's gas installer* with information as to the *Distributor's requirements and installation charges* for any proposed new *gas installation* or proposed changes to an existing *gas installation*, including advice about supply extensions. The information must be provided free of charge and in writing if so requested.

(f) In this clause 3.1, the phrase:

(i) minor or infill extension area means an area which is up to 1 kilometre radially from the nearest part of the *distribution system main*; and

(ii) fair and reasonable terms and conditions means:

A. terms and conditions agreed between a *Distributor* and a *customer*, provided that the *customer* has received prior written notice of the terms and conditions, and has also been provided with a written copy of this clause

3.1;

B. principles or terms and conditions proposed by the *Distributor* and approved by the *Commission*; or

C. terms and conditions consistent with the Guidelines set out in Schedule 2 of the *Gas Distribution System Code of Practice*.

Note: Clause 4 of the *distribution licence* made pursuant to section 29(c) of the *Gas Industry Act* requires compliance with the *Gas Distribution System Code of Practice*. Pursuant to section 31(1) of the *Gas Industry Act*, if a *distribution licence* is subject to a condition of a kind referred to in section 29(c) of the *Gas Industry Act*, the *Commission* may:

- (a) in accordance with procedures specified by the *Commission*, amend specified industry codes, standards, rules or guidelines, or a document referred to in any of them, for the purposes of their application under the licence; and
- (b) resolve, or seek to resolve, disputes between the licensee and any other person relating to the specified industry codes, standards, rules or guidelines, or a document referred to in any of them, as they apply under the licence.

### 3.2 Augmentation

(a) Subject to clause 3.2(b), if a *Distributor* proposes to recover the costs of *augmentation* from another person, the *Distributor* must:

- (i) request offers to perform the *augmentation* works from at least two persons, other than the *Distributor*, who compete in performing works of that kind (or who are capable of so performing works of that kind); and
- (ii) comply with any guidelines published by the *Commission* in relation to the request for offers.

(b) A *Distributor* is not obliged to comply with clause 3.2(a) where:

- (i) each person from whom the *Distributor* proposes to recover the costs of *augmentation* has been provided with a copy of this clause 3 and has subsequently agreed in writing that the *Distributor* need not comply;

(ii) expressly provided for in the *Commission's* guidelines referred to in clause 3.2(a)(ii); or

(iii) the *Commission* has otherwise consented in writing. Such consent may be given subject to conditions.

## 4. DISCONNECTION AND RECONNECTION

## 4.1 Disconnection

- (a) A *Distributor* may disconnect a *customer* from the *distribution system*:
- (i) subject to clause 4.1(b), at the direction in writing of a *Retailer*;
  - (ii) where the *customer* requests the *Distributor* to disconnect the *customer*;
  - (iii) where the *Distributor* is directed to do so by the Director of Energy Safety under the Gas Safety Act 1997;
  - (iv) if a *customer* is obtaining or has obtained supply of *gas* at a supply address otherwise than in accordance with the *Gas Distribution System Code of Practice* or any *regulatory requirement*; or
  - (v) as set out in clause 9 of this Code of Practice.
- (b) Where a *Retailer* directs a *Distributor* to disconnect a *customer* pursuant to clause 4.1(a)(i), the *Distributor* must not disconnect the *customer* unless the *Retailer* certifies in writing that it is entitled to disconnect the *customer* under the *Gas Industry Act* or the applicable contract with the *customer*.
- (c) A *Distributor* may before making a disconnection directed by a *Retailer* in accordance with clause 4.1(a)(i) require the *Retailer*, in consideration of the *Distributor* disconnecting the *customer*, to indemnify and keep indemnified the *Distributor* from and against any loss, liability, damage, claim, action, proceeding, cost and expense suffered or incurred by or made or brought against the *Distributor* in consequence of the disconnection of the *customer* from the *distribution system*.
- (d) For Tariff V customers, the maximum disconnection fee charged to the customer will be no greater than A\$50 per connection.
- (e) For Tariff D customers, the disconnection fee charged to the customer will be the actual cost of disconnection.

## 4.2 Reconnection

- (a) Subject to clause 4.2(c), a *Distributor* must reconnect a disconnected *customer* who satisfies the requirements for *connection* to its *distribution system* on payment of any applicable reconnection charge.
- (b) Any reconnection under clause 4.2(a) must be completed within sufficient time for a *Retailer* to meet its contractual obligations to the *customer* as set out in the *Energy Retail Code of Practice*.



- 
- (c) A *Distributor* is not obliged to reconnect a disconnected *customer* where the circumstances giving rise to the disconnection in accordance with clause 4.1 continue to apply.

## 4A. LIFE SUPPORT EQUIPMENT

### 4A.1 Requirement

A *Distributor* is required to perform its obligations under this clause 4A in a way that promotes the objective of this clause.

### 4A.2 Objective

The objective of this clause 4A is to ensure that persons who require *life support equipment* receive the full protections of the *life support protections* from when they first advise their *Retailer* or *Distributor* that the premises require *life support equipment*. These *life support protections* apply until the premises are validly *deregistered*.

### 4A.3 Registration of life support equipment

#### 4A.3.1 Distributor obligations when advised by customer

- (a) Within one *business day* after being advised by a *small customer* that a *life support resident* resides, or is intending to reside, at the *small customer's* premises, a *Distributor* must record in a *register of life support customers and residents* the *life support customer details*.
- (b) A *Distributor* who is advised by a *small customer* that a *life support resident* resides, or is intending to reside, at the *small customer's* premises, must determine whether the *life support equipment* is fueled by both electricity and gas and, if it is, inform the *customer* that the *customer* should inform the electricity retailer or *Distributor* who supplies electricity at the *small customer's* premises that a *life support resident* resides, or is intending to reside, at the *small customer's* premises.
- (c) Within five *business days* after being advised by a *small customer* that a *life support resident* resides, or is intending to reside, at the *small customer's* premises, a *Distributor* must give to the *customer*, in plain English:
- (i) a *medical confirmation form* in accordance with clause 4A.5;
  - (ii) information explaining that, if the *customer* fails to provide *medical confirmation*, the *customer* may be *deregistered* and, if so, the *customer* will cease to receive the *life support protections*;
  - (iii) advice that there may be *Distributor planned interruptions* or *unplanned interruptions* to the supply at the supply address and that the *Distributor* is required to notify them of a *Distributor planned interruption* in accordance with clause 9.6;
  - (iv) information to assist the *customer* to prepare a plan of action in the case of an *unplanned interruption*;

- (v) an emergency telephone contact number for the *Distributor* (the charge for which is no more than the cost of a local call);
  - (vi) advice that if the *customer* decides to change *retailer* at the premises and a person residing at the *customer's* premises continues to require *life support equipment*, the *customer* should advise their new *retailer* of the requirement for *life support equipment*;
  - (vii) information about the types of equipment that fall within the definition of *life support equipment*, and the additional information provided in Schedule 7 of the *Energy Retail Code of Practice*;
  - (viii) advice that the *customer* may be eligible for concessions and rebates offered by the State or Federal governments, including information about how to access them; and
  - (ix) information in community languages about the availability of interpreter services for the languages concerned and telephone numbers for the services.
- (d) Within one *business day* after being advised by a *small customer* that a *life support resident* resides, or is intending to reside, at the *small customer's* premises, a *Distributor* must notify the *retailer* that a person residing or intending to reside at the *customer's* premises requires *life support equipment* and the date from which the *life support equipment* is required.

#### 4A.4 Distributor obligations when advised by retailer

Within one *business day* after being advised by a *retailer*, under section 48DI(4) of the *Gas Industry Act*, that a *life support resident* resides, or is intending to reside, at the *small customer's* premises, a *Distributor* must record in a *register of life support customers and residents* the *life support customer details*.

#### 4A.5 Content of medical confirmation form

- (a) A *medical confirmation form* must:
- (i) be dated;
  - (ii) state that completion and return of the form to the *Distributor* will satisfy the requirement to provide *medical confirmation* under this Code of Practice;
  - (iii) request the following information from the *customer*:
    - (A) the supply address of the *customer's* premises;
    - (B) the date from which the *customer* requires supply of gas at the premises for the purposes of the *life support equipment*; and

(C) *medical confirmation*;

(iv) specify the types of equipment that fall within the definition of *life support equipment*.

(v) advise the date by which the *customer* must return the *medical confirmation form* to the *Distributor*; and

(vi) advise the *customer* they can request an extension of time to complete and return the *medical confirmation form*.

**4A.6 Confirmation of supply address as requiring life support equipment** (a) Where

a *medical confirmation form* is provided to a *customer*, the *Distributor* must:

(i) from the date of the *medical confirmation form*, give the *customer* a minimum of 50 *business days* to provide *medical confirmation*;

(ii) provide the *customer* at least two written notices to remind the *customer* that the *customer* must provide *medical confirmation* (each a *confirmation reminder notice*);

(iii) ensure the first *confirmation reminder notice* is provided no less than 15 *business days* from the date of issue of the *medical confirmation form*;

(iv) ensure the second *confirmation reminder notice* is provided no less than 15 *business days* from the date of issue of the first *confirmation reminder notice*; and

(v) on request from a *customer*, give the *customer* at least one extension of time to provide *medical confirmation*. The extension must be a minimum of 25 *business days*.

(b) A *confirmation reminder notice* must:

(i) be dated;

(ii) state the date by which the *medical confirmation* is required;

(iii) specify the types of equipment that fall within the definition of *life support equipment*; and

(iv) advise the *customer* that:

- (A) the *customer* must provide *medical confirmation*;
- (B) the *customer* is temporarily registered as a *life support customer* until the *medical confirmation* is received;
- (C) failure to provide *medical confirmation* may result in the *customer* being

13

## Gas Distribution System Code of Practice 1 March 2022 Version 15

---

*deregistered*; and

- (D) the *customer* can request an extension of time to provide *medical confirmation*.

### 4A.7 Ongoing Distributor obligations

- (a) Where a *Distributor* is required to record *life support customer* details in a *register of life support customers and residents*, the *Distributor* has the following ongoing obligations:
  - (i) within one *business day* after receiving relevant information about the *life support equipment* requirements for the *customer's* premises (including *medical confirmation*) or any relevant contact details, give such information to the *retailer* for the purposes of updating the *retailer's register of life support customers and residents*, unless the relevant information was provided to the *Distributor* by the *retailer*;
  - (ii) within one *business day* after being advised by a *customer* or *retailer* of any update to the *life support equipment* requirements for the *customer's* premises or any relevant contact details, update the *register of life support customers and residents*;
  - (iii) except in the case of an *interruption*, not *disconnect* the *supply address* after the date the *life support equipment* will be required at the *supply address*; and
  - (iv) in the case of an *interruption* that is a *Distributor planned interruption*, comply with clause 9.6.
- (b) In addition to the obligations specified in clause 4A.7(a), where a *Distributor* is required to record a *customer's life support customer details* in a *register of life support customers and residents* under clause 4A.3(a)(i), if the *Distributor* becomes aware that the *customer* has subsequently transferred to another *retailer* (a new *retailer*) at that *supply address*, the *Distributor* must (within one *business day* from becoming aware) that a person residing at the *customer's supply address* requires *life support equipment*.

### 4A.8 Deregistration of life support customer

- (a) A *Distributor* must not *deregister* a *customer* except in the circumstances permitted under clauses 4A.8 to 4A.12.

- (b) If a *customer* is *deregistered* by a *Distributor*, the *Distributor* must:
- (i) within five *business days* of the date of *deregistration*, notify the *retailer* of the date of *deregistration* and reason for *deregistration*; and
  - (ii) within one *business day* from *deregistration*, update its *register of life support customers and residents* as required by clause 4A.13.
- (c) If a *Distributor* is notified by a *retailer* that the *retailer* or an *exempt person* has *deregistered* a *customer's supply address* under the *Energy Retail Code of Practice*, the

*Distributor* must (within one *business day* from notification) update *life support customer details* entered in its *register of life support customers and residents* as required by clause 4A.13.

#### **4A.9 Cessation of Distributor obligations after deregistration**

The *distributor* obligations under clause 4A.7 cease to apply in respect of a *customer* once that *customer* is validly *deregistered*.

#### **4A.10 Deregistration where medical confirmation not provided**

- (a) Where a *customer* has been registered by a *Distributor* under clause 4A.3(a) fails to provide *medical confirmation*, the *Distributor* may *deregister* the *customer* only when:
- (i) the *Distributor* has complied with the requirements under clause 4A.6;
  - (ii) the *Distributor* has taken reasonable steps to contact the *customer* in connection with the *customer's* failure to provide *medical confirmation* in one of the following ways:
    - 1. in person;
    - 2. by telephone; or
    - 3. by electronic means;
  - (iii) the *Distributor* has provided the *customer* with a *deregistration notice* no less than 15 *business days* from the date of issue of the second *confirmation reminder notice* issued under clause 4A.6(a)(iv); and
  - (iv) the *customer* has not provided *medical confirmation* before the date for *deregistration* specified in the *deregistration notice*.

- (b) A *deregistration notice* must:

- (i) be dated;
  - (ii) specify the date on which the *customer* will be *deregistered*, which must be at least 15 *business days* from the date of the *deregistration notice*;
  - (iii) advise the *customer* they will cease to be a *registered life support customer* unless *medical confirmation* is provided before the date for *deregistration*; and
  - (iv) advise the *customer* that the *customer* will no longer receive the *life support protections* when the *customer* is *deregistered*.
- (c) Where a *customer* has been registered by a *Distributor* under clause 4A.4, a *Distributor* may *deregister* the *customer* after being notified by the *retailer* that the *retailer* has

*deregistered* the *customer's* supply address pursuant to clause 166 of the *Energy Retail Code of Practice*.

#### **4A.11 Deregistration where there is a change in the customer's circumstances**

Where a *customer* who has been registered by a *Distributor* under clause 4A.3(a)(i) or 4A.4 advises the *Distributor* that the person for whom the *life support equipment* is required has vacated the premises or no longer requires the *life support equipment*, the *Distributor* may *deregister* the *customer*:

- (a) on the date specified in accordance with subclause (a)(i)(B) if:
  - (i) the *Distributor* has provided written notification to the *customer* advising:
    - (A) that the *customer* will be *deregistered* on the basis that the *customer* has advised the *Distributor* that the person for whom the *life support equipment* is required has vacated the premises or no longer requires the *life support equipment*;
    - (B) the date on which the *customer* will be *deregistered*, which must be at least 15 *business days* from the date of that written notification;
    - (C) that the *customer* will no longer receive the *life support protections* when the *supply address* is *deregistered*; and
    - (D) that the *customer* must contact the *Distributor* prior to the date specified in accordance with subclause (a)(i)(B) if the person for whom the *life support equipment* is required has not vacated the premises or requires the *life support equipment*; and
  - (ii) the *customer* has not contacted the *Distributor* prior to the date specified in accordance with subclause (a)(i)(B) to advise that the person for whom the *life*

*support equipment* is required has not vacated the supply address or requires the *life support equipment*; or

(b) a date that is less than 15 *business days* from the date of written notification if the *customer* or their authorised representative give *explicit informed consent* to the *customer* being *deregistered* on that date.

(c) *Explicit informed consent* is consent given by a *customer* to a *Distributor* where:

- (i) the *Distributor*, or a person acting on behalf of the *Distributor*, has clearly, fully and adequately disclosed in plain English all matters relevant to the consent of the *customer*, including each specific purpose or use of the consent; and
- (ii) the *customer* gives the consent in accordance with subclause (d); and
- (iii) the *customer* is competent to do so.

(d) *Explicit informed consent* requires the consent to be given by the *customer*:

- (i) in writing signed by the *customer*; or
- (ii) verbally, so long as the verbal consent is evidenced in such a way that it can be verified and made the subject of a record; or
- (iii) by electronic communication generated by the *customer*.

(e) A *Distributor* must create a record of each *explicit informed consent* required by clause 4A.11 and provided by a *customer*, and retain the record for at least two years.

(f) A *Distributor* may *deregister* a *customer* after being notified by the *retailer* that the *retailer* has *deregistered* the *customer* pursuant to clause 166 of the *Energy Retail Code of Practice*.

(g) A *Distributor* may, at any time, request a *customer* whose supply address has been registered under clause 4A.3 to confirm whether the person for whom *life support equipment* is required still resides at the premises or still requires *life support equipment*.

#### **4A.12 Deregistration where there is a change in the customer's retailer**

(a) Where a *Distributor* has registered a *customer* pursuant to clause 4A.4 and the *Distributor* becomes aware that the *customer* has subsequently transferred its *supply address* to another *retailer*, the *Distributor* may *deregister* the *customer* on the date specified in accordance with subclause (a)(i)(B) if:

- (i) the *Distributor* has provided written notification to the *customer* advising:

- (A) that the *customer* will be *deregistered*;
  - (B) the date on which the *customer* will be *deregistered*, which must be at least 15 *business days* from the date of that written notification;
  - (C) that the *customer* will no longer receive the *life support protections* under this Clause 4A when the customer is *deregistered*; and
  - (D) that the *customer* must contact the *Distributor* prior to the date specified in accordance with subclause (a)(i)(B) to advise that a person residing at the *customer's supply address* requires *life support equipment*; and
    - (ii) the *customer* has not contacted the *Distributor* prior to the date specified in accordance with subclause (a)(i)(B) to advise that a person residing at the *customer's supply address* requires *life support equipment*.
- (b) Nothing in subclause (a) affects the operation of clause 4A.3(a) and 4A.4 following a *customer's* transfer to the other *retailer*.

#### **4A.13 Registration and deregistration details must be kept by Distributors**

A *Distributor* must:

- (a) establish policies, systems and procedures for registering and *deregistering life support customers*, to facilitate compliance with the requirements in this clause 4A; and
- (b) ensure that the *register of life support customers and residents* is maintained and kept up to date, including:
  - (i) the date when the *customer* requires supply of energy at the supply address for the purposes of the *life support equipment*;
  - (ii) when *medical confirmation* was received from the *customer* in respect of the premises;
  - (iii) the date when the customer is *deregistered* and the reason for *deregistration*; and
  - (iv) a record of communications with the *customer* required by clauses 4A.11, and 4A.12.

### **5. METERING PROVISIONS**

#### **5.1 Metering provisions – Scope**

- (a) Clauses 5 to 8 set out the metering provisions of the *Gas Distribution System Code of Practice*.



- (b) The metering provisions of the *Gas Distribution System Code of Practice* provide for:
- (i) the obligation to provide *metering installations*;
  - (ii) the standards of *metering installations*;
  - (iii) the testing of *metering installations*; and
  - (iv) the recording and provision of *metering data*.
- (c) The metering provisions of the *Gas Distribution System Code of Practice* are to be read, unless the contrary intention appears, in conjunction and consistently, with:
- (i) clause 4.4 of the *Market Rules*, which set out, amongst other things, the metering requirements in connection with the operation of the *Market Rules*;
  - (ii) applicable *Retail Rules*, which provide for, amongst other things, the collection, recording and storage of *metering data* in relation to the operation of the retail *gas* market.

## 6. PROVISION OF METERING INSTALLATIONS

### 6.1 Provision of metering installations

- (a) Subject to clause 6.1(b) the *Distributor* must provide a *metering installation* at each *distribution supply point*.
- (b) Subject to clause 6.1(c), the *Distributor* shall not be obliged to provide a metering installation at a *distribution supply point* where the reasonably anticipated cost of installing, testing and maintaining that *metering installation* incurred by the *Distributor* exceeds the revenue reasonably anticipated to be derived by the *Distributor* from the *distribution* of gas to that *distribution supply point*.
- (c) The *Distributor* must provide a *metering installation* where required under the *Market Rules*.
- (d) Where the *Distributor* does not provide a *metering installation*, the *Distributor* and the *User* shall agree on another basis to determine the amount of *gas* so supplied.
- (e) A *metering installation*:
  - (i) comprising an *interval meter*, must contain telemetry if required by the *Market*

*Rules* or, in the case of a *non-declared transmission system*, the *Retail Rules*;

- (ii) must contain an index register that
  - A. has a visible and accessible display of *metering data*; or
  - B. allows the *metering data* to be accessed and read at the same time by portable computer or other equipment of a type or specification reasonably acceptable to all persons who are entitled to have access to that *metering data*.
- (f) Subject to any applicable *Retail Rules*, *gas* is to be metered by quantity and converted to units of energy for billing purposes.
- (g) A *User* may install a *meter* at or after the *distribution supply point*.
- (h) Notwithstanding clause 6.1(g), the *metering data* recorded by the *metering installation* installed by the *Distributor* will be the *metering data* for billing purposes and market settlement purposes.

## 6.2 Type of metering installation

- (a) The *Distributor* shall provide an *interval metering installation* where:

19

## Gas Distribution System Code of Practice 1 March 2022 Version 15

---

- (i) at any time, the consumption of *gas* at the *distribution supply point* has exceeded 10,000 gigajoules for any consecutive 12 month period; or
  - (ii) in respect of a new *distribution supply point*, the consumption of *gas* at the *distribution supply point* is likely to be more than 10,000 gigajoules for any consecutive 12 month period commencing during the immediately following 12 month period.
- (b) A *Distributor* must not, from the date 6 months after the introduction of full retail contestability, replace an *interval metering installation* with a *basic metering installation* at a *distribution supply point* that became contestable on 1 September 2001.
  - (c) In all other cases not provided for in clauses 6.2(a) and 6.2(b), a *Distributor* shall provide as a minimum a *standard metering installation*.

## 6.3 Costs of metering installations

- (a) Where a *Distributor* is required to provide a *standard metering installation* pursuant to clause 6.2(c), the *Distributor* will be responsible for the cost of providing and installing that *metering installation*.

- (b) The *Distributor* is responsible for the cost of providing and installing an *interval metering installation* and associated equipment, where such equipment has not previously been provided, at *distribution supply points* in respect of which the consumption of gas between the period 1 January 2001 to 31 December 2001 was more than 10,000 gigajoules.
- (c) If a *Distributor* is, pursuant to clause 6.2(a), required to install an *interval metering installation* then the *User* must bear any fair and reasonable costs incurred by the *Distributor* in installing that *interval metering installation* in excess of those costs that the *Distributor* would have incurred in installing a *standard meter* and associated *metering installation*.
- (d) Subject to clause 6.3(b), if the *User* requests a *metering installation* which is different from a *standard metering installation* then the *User* will be responsible for the costs that exceed the fair and reasonable costs that the *Distributor* would have incurred in providing and installing a *standard metering installation*.

#### 6.4 Installation database

- (a) A *Distributor* must maintain an *installation database* in respect of each *metering installation*.
- (b) The *installation database* must contain the following information:
  - (i) the Metering Installation Reference Number (MIRN);
  - (ii) the location of each installed *meter, corrector* and *data logger*;

- (iii) for each *meter, corrector* and *data logger* that is installed, the name and address of the *customer* and the date of installation;
- (iv) the next scheduled date for test or replacement of each *meter* and *corrector*;
- (v) data on performance of each *meter, corrector* and *data logger* (where relevant);
- (vi) calibration records of all devices used to measure the quantity of *gas*;
- (vii) testing records of all devices used to measure the quantity of *gas*;
- (viii) date and details of all seals and labels applied to *meters* and *correctors*;
- (ix) the date of, and details of, the most recent maintenance of all devices used to measure the quantity of *gas*; and
- (x) the next scheduled date for maintenance of all devices used to measure the quantity

of *gas*.

(c) A *Distributor* must maintain the information contained in the *installation database*:

- (i) in an accessible format for a minimum period of 16 months from the date of inclusion of the information in the database; and
- (ii) in archive for 7 years from the date of inclusion of the information in the database, or for the life of the relevant *meter*, whichever is longer.

(d) The *Distributor* must provide, upon request in writing, access to an *Affected Party* to information in the *installation database* relevant to that person:

- (i) within two *business days*, where the information is in an accessible form as required by clause 6.4(c)(i); and
- (ii) otherwise within thirty *business days*,  
from the date of receipt of the request.

## 6.5 Metering installation standards

(a) A *Distributor* must ensure that each of its *metering installations*:

- (i) complies, and is calibrated to comply, with the *error limits*;
- (ii) relating to *transfer points* on the *transmission system* complies, and is calibrated to comply, with the metering uncertainty limits and calibration requirements in Schedule 4.1 of the *Market Rules*;

(iii) containing pressure regulators are able to provide sufficient flow at the minimum regulator inlet pressure, and where a fixed pressure factor is applied, are able to reliably control the outlet pressure to meet the *distribution system* pressure requirements in Schedule 1, Part A to the *Gas Distribution System Code of Practice*;

(iv) incorporating an *interval meter* contains telemetry as required by the *Market Rules* or, in the case of a *non-declared transmission system*, the applicable *Retail Rules*.

## 6.6 Security

(a) A *Distributor* must use reasonable endeavours to protect the *metering installation* from unauthorised interference or damage.

(b) A *Distributor* must in respect of new *metering installations*, provide seals or other

appropriate devices to detect any interference.

- (c) If a *Distributor* finds evidence that the accuracy of a *metering installation* has been affected by any tampering, then the *Distributor* must test the *metering installation* to ensure that the *metering installation* operates within the *error limits*.

## 7. METERING INSTALLATION TESTING

### 7.1 Accreditation and certification

- (a) A *Distributor* must conduct tests, or must cause tests to be conducted, in respect of the setting, sealing or certifying the accuracy of *meters* and *correctors*, by persons, or in a facility, accredited by *NATA* to conduct such tests.
- (b) A *distributor* must ensure that calibrating equipment used in connection with the calibration of its *metering installations* is certified by a verifying authority empowered to issue certificates under Regulation 13 of the National Measurement Regulations (Cth).

### 7.2 Meter testing

#### 7.2.1 Acceptance testing and Type testing of metering installations

- (a) A *Distributor* must carry out, or cause to be carried out, *acceptance tests* on *meters*, *correctors* and *data loggers* that are components of *metering installations* in the following circumstances:
  - (i) before a new *meter*, *corrector* or *data logger* is placed in service;
  - (ii) before a *meter*, *corrector* or *data logger* that has been removed from service is placed back into service; and
  - (iii) after any repairs, maintenance or recalibration performed on a *meter*, *corrector* or *data logger* have been completed.
- (b) A *distributor* must ensure that any new type of *metering installation* is submitted for *type testing*.
- (c) A *Distributor* must ensure that *any metering installations* that have been modified are assessed to determine whether the modified design continues to meet the minimum standards prescribed by the *Gas Distribution System Code of Practice*.
- (d) If reasonable grounds exist for concluding that modifications to a *metering installation* affect its measuring capability, then the *Distributor* must ensure that the *metering*

*installation* is submitted for *type testing*.

### 7.2.2 Testing on request

(a) A *Distributor* must:

- (i) within 15 *business days* of a request from an *Affected Party*, test a *metering installation* which has been installed to measure and record the amount of *gas* supplied to a *customer* to ascertain whether or not the *metering installation* is defective; and
- (ii) give the *customer*, and the *Affected Party* who requests a test, at least five *business days*' notice (or agree such other mutually convenient time) of when the requested test is proposed to be performed.

(b) A *Distributor* may seek payment from the *Affected Party* of the anticipated costs of testing the *metering installation*, including the cost of replacing any seal used to protect the *metering installation* broken to allow the test to be carried out, if the *metering installation* is not defective and meets the accuracy standards prescribed by the *Gas Distribution System Code of Practice*. A *Distributor* must not seek payment from the *Affected Party* prior to the commencement of the test.

### 7.2.3 Meter families

(a) For *meters* that are defined in *AS/NZS 4944*:

- (i) the initial life of a *meter family* must be determined by the *Distributor* in accordance with the requirements of *AS/NZS 4944*;
- (ii) the *Distributor* must provide for the *Commission's* approval, the sampling plan for the initial life of the *meter family* setting out the calculations in accordance with the requirements of *AS/NZS 4944*;
- (iii) following the testing by the *Distributor* in accordance with subclause (a)(i) to determine the initial life of a *meter family*, the *Distributor* is required to provide to the *Commission* the calculations upon which the *Distributor* has determined the initial life of the *meter family* and the test results for both 20% and 100% of the

badge capacity for the *meter family*;

- (iv) if a *Distributor* intends to retain the *meters* in a *meter family* after the end of the initial life of the *meter family*, the *Distributor* must notify the *Commission* of its intention at least three months before the end of the initial life of the *meter family*;
- (v) the ongoing life of a *meter family* must be determined by the *Distributor* in accordance with *AS/NZS 4944*;

- (vi) the *Distributor* must provide for the *Commission's* approval, the sampling plan for the ongoing life of the *meter family* setting out the calculations in accordance with the requirements of *AS/NZS 4944*; and
- (vii) following the testing by the *Distributor* in accordance with subclause (a)(iv) to determine the ongoing life of a *meter family*, the *Distributor* is required to provide to the *Commission* the calculations upon which the *Distributor* has determined the ongoing life of the *meter family* and the test results for both 20% and 100% of the badge capacity for the *meter family*.

(b) For *meters* that are not defined in *AS/NZS 4944*:

- (i) the initial life of a *meter family* is 15 years commencing on the day a *meter* in that *meter family* was first used in the supply of *gas* to a *customer*;
- (ii) if a *Distributor* intends to retain the *meters* in a *meter family* after the end of the initial life of that *meter family*, the *Distributor* must notify the *Commission* of its intention at least 3 months before the end of:
  - A. the initial life of the *meter family*; and
  - B. each year that the *meter family* is in service after the initial life of the *meter family*;
- (iii) if a *Distributor* intends to retain the *meters* in a *meter family* after the end of the initial life of that *meter family* the *Distributor* must, in addition to the other *meter* testing provisions in the *Gas Distribution System Code of Practice*, establish and maintain a sampling plan approved by the *Commission* to ensure that each *meter family* is tested in the field at least once during the initial life of the *meter family* and at least once in each subsequent year;
- (iv) the sampling plan must provide that *meters* be tested at both 20% and 100% of the badge capacity of the *meters*;
- (v) the *Distributor* is required to provide to the *Commission* the test results for both 20% and 100% for that *meter family*; and
- (vi) if the test results do not satisfy:
  - A. the maximum allowable error limits for the badge capacity of the *meters* at both 20% and 100% as set out in Part B of Schedule 1; and

B. such other requirements of the sampling plan approved by the *Commission*

then the *Distributor* must replace or recalibrate all *metering installations* in that *meter family*.

### 7.3 Non-compliant meters

If the accuracy of a *metering installation* does not comply with the requirements of the *Gas Distribution System Code of Practice* or if a *Distributor* becomes aware of any matter which could affect the integrity of the *metering data*, the *Distributor* must at the cost of the *Distributor*:

- (a) notify *the Affected Parties* as soon as practicable;
- (b) arrange for the accuracy of the *metering installation* to be restored or for the *metering installation* to be replaced by such time as the *Affected Party* may reasonably determine so that the *metering installation* meets the requirements of the *Gas Distribution System Code of Practice*; and
- (c) until the restoration or replacement of the *metering installation* in accordance with subclause (b) use substitute readings in accordance with the relevant *Retail Rules*.

### 7.4 Correction

- (a) In undertaking a *meter* reading at a *metering installation*, the *Distributor* must adjust the *meter* reading for pressure, temperature or supercompressibility, or a combination of these factors, through applying the correction factors or using a *corrector* when:
  - (i) the error arising from these effects exceeds the requirements of the *Gas Distribution System Code of Practice* including Schedule 1 Part B; or
  - (ii) the supply of gas is not through a *standard metering installation*; or
  - (iii) the operating condition varies during the course of the day affecting the pressure, temperature or supercompressibility.
- (b) During the registration or change process, the *Distributor* must advise *the Affected Parties* (*AEMO* and the *Retailers*) of the method employed for adjusting the *meter* reading, and the correction factors.
- (c) A *Distributor* can only make an adjustment for *meter* error using a *corrector* or a *correction factor* when:
  - (i) the *corrector* and *meter* for the specified correction is uniquely identified;
  - (ii) the accuracy of the *meter* and/or *corrector* is within the *error limits*;
  - (iii) the method of adjustment by the *corrector* can be varied; and



device and the settings used.

## 7.5 Sealing and labelling

- (a) A *Distributor* must place a label on any *meter* and *corrector* that has been subject to an *acceptance test* and found to pass the test. The label must include a distinguishing mark and the year of test attached to indicate that it has passed the test.
- (b) If a *meter* or *corrector* has not been tested or has been found not to pass an *acceptance test*, the *Distributor* must ensure that it is not labelled.

## 8. METER READING AND DATA

### 8.1 Collection of metering data

- (a) In relation to the supply of *gas* to a *customer* and unless otherwise agreed with the *User*, a *Distributor* must collect *data* stored in *basic metering installations*:

- (i) by inspecting the *metering installation*; or

- (ii) by electronic means; or

- (iii) by using substitute readings made in accordance with the applicable *Retail Rules*,

as frequently as is required to enable the relevant *Retailer* to discharge its obligations and exercise its rights consistent with the *Energy Retail Code* and the applicable *Retail Rules*.

- (b) A *Distributor* must:

- (i) retain *basic metering data* it collects in accordance with the *Retail Rules*; and

- (ii) supply *basic metering data* it collects to the relevant *Retailer* on request from the *Retailer*.

- (c) Where *metering data* is collected by electronic means, if there is any discrepancy between:

- (i) the data stored in a *metering installation*; and

- (ii) *metering data* in respect of that *metering installation*,

the data stored in the *metering installation* is to be the *prima facie* evidence of the quantity of *gas* or energy, if applicable, supplied to the relevant *customer*.

- (d) The owner of the *meter* is the owner of all *metering data* produced or recorded by that *meter*. Each other person entitled to access to that *metering data* under the *Gas Distribution System Code of Practice* has the right to a non-exclusive licence to use that *metering data* for the purposes of its business, subject to the provisions of the *Gas Industry Act*.

## 8.2 Pulse outputs

A *Distributor* must:

- (a) within a reasonable time of being requested by an *Affected Party*, provide pulse outputs representing the *quantities* of *gas* measured for use by the *Affected Party*, provided that the *Distributor* may charge the *Affected Party* requesting the pulse output for the fair and reasonable costs of providing the pulse output; and
- (b) where the *metering installation* measures the supply of *gas* to a *market participant* where the meter is a pulse output meter, ensure that the pulse output provided to *AEMO* is provided in a standardised form in accordance with Clause 4.4.16 of *the Market Rules*.

## 8.3 Access to metering data

- (a) The only persons entitled to have either direct or remote access to *metering data* from a *metering installation* in relation to a *distribution supply point* are:
- (i) the *Market Participant* associated with the *distribution supply point*;
  - (ii) the *Distributor* associated with the *distribution supply point*;
  - (iii) the *Commission* and its authorised agents;
  - (iv) *AEMO* and its authorised agents; and
  - (v) any *customer* which is supplied with *gas* through the *distribution supply point*, and any authorised agent of that *customer*.
- (b) A *Distributor* must not provide *metering data* to a person who is not entitled to receive that data.
- (c) For *metering installations* with electronic data storage and access capabilities, a *Distributor* must:
- (i) ensure that *metering data* held in a *metering installation* is protected from local or remote electronic access by suitable password and security controls;
  - (ii) hold 'read-only' and 'write' passwords;

- (iii) allocate 'read-only' passwords for each *metering installation* to the *customer* which has an interest in the *metering installation*; and
  - (iv) keep secure records of electronic access passwords.
- (d) Electronic access to *metering data* from a *metering installation* must only be provided where passwords are allocated.
- (e) If remote access is ordinarily available, but unavailable for a period of 5 consecutive *business days*, a *Distributor* must, if requested by any person entitled to have access, obtain readings locally from the *metering installation* and provide those readings to that person.
- (f) A *Distributor* must not make, and must use reasonable endeavours to ensure that no other person makes, any alteration to the original stored data in a *metering installation*.

## 9. CURTAILMENT

### 9.1 Curtailment

A *Distributor* may curtail or interrupt the delivery of *gas* to a *distribution supply point* to the extent, and for such period of time, as the *Distributor* considers is necessary:

- (a) if there is material damage to that part of the *distribution system* used to deliver *gas* at the *distribution supply point* or other necessity for repair;
- (b) if a *force majeure event* occurs which affects the *Distributor's* ability to deliver *gas* at the *distribution supply point*;
- (c) in the event of or likelihood of an *emergency*;
- (d) for a health or safety reason (subject to clause 9.2);
- (e) if work under a planned maintenance or *augmentation* program is undertaken, and at least 10 days written notice has been given to the *User* under clause 9.6(a); and
- (f) under contractual interruption arrangements agreed between a *Retailer* and a *customer*, or the *Distributor* and a *User*.

### 9.2 Notice of health or safety interruption

Except in the case of an *emergency*, or where there is a need to reduce the risk of damage to persons or property or where relevant regulatory requirements require it, the *Distributor* must not disconnect a *customer's* supply address for a health or safety reason unless the *Distributor* has:

- (a) given the *customer* written notice of the reason;

- (b) allowed the *customer* five *business days* to rectify the reason (the five *business days* must be counted from the date of receipt of the notice); and
- (c) at the expiration of those five *business days* given to the *customer*, under subclause (b) by way of a written disconnection warning, give the *customer* a further five *business days*' notice of its intention to disconnect the *customer* (the five *business days* must be counted from the date of receipt of this notice under clause 9.2).

### 9.3 Unplanned interruptions

In the case of an *unplanned interruption*, the *Distributor* must provide a 24 hour telephone number to enable *customers* to ascertain details, and the expected duration, of the interruption.

### 9.4 Right to information by a customer

The *Distributor* must, at the request of a *customer*, provide an explanation for any interruption to supply to the *customer's* supply address and, if the *customer* requests that the explanation be in writing, it must be given in writing within 20 *business days* of the request.

### 9.5 Minimisation of interruption

The *Distributor* must use best endeavours to minimise the duration of an interruption to supply referred to in clauses 9.1(a) to 9.1(e) and must restore supply as soon as practicable.

### 9.6 Interruption procedures

- (a) A *Distributor* must give *Affected Parties* (including *AEMO* as required) 10 *business days* prior notice of any planned maintenance testing or repair which will require interruptions to the delivery of *gas* at one or more *distribution supply points*.
- (b) The *Distributor* must use reasonable endeavours to promptly notify *Affected Parties* (including *AEMO* as required) of any *unplanned interruptions* to the delivery of *gas* at one or more *distribution supply points*.

### 9.7 Residual retailer obligations

- (a) A *Retailer* must notify the *Affected Parties* (including *AEMO* as required) of its contractual arrangements with a *customer* relating to interruption or curtailment within 21 *business days* of entering into such arrangements.
- (b) A *Retailer* must give *Affected Parties* (including *AEMO* as required) seven days' prior notice of any planned maintenance testing or repair which will require interruptions to the delivery of *gas* at one or more *distribution supply point* of a *Customer* and must liaise with *Customers* and use reasonable endeavours to accommodate their needs.

- (c) If the *Distributor* notifies a *Retailer* of any interruption to delivery of *gas* at a *distribution* delivery point, then the *Retailer* must use reasonable endeavours to ensure that its *Customers* comply with any reasonable requirement set out in the notice.

## 10. CUSTOMER COMPLAINT HANDLING

- (a) A *Distributor* must handle a complaint by a *customer* in accordance with the relevant *Australian Standard* on complaints handling or the 'Benchmark for Industry Based Customer Dispute Resolution Schemes' published by the Commonwealth Government.
- (b) The *Distributor* must make readily available to *customers* information on its complaint handling processes.
- (c) When a *Distributor* responds to a *customer's* complaint, the *Distributor* must inform the *customer* that the *customer*:
- (i) has a right to raise the complaint to a higher level within the *Distributor's* management structure; and
  - (ii) if, after raising the complaint to a higher level the *customer* is still not satisfied with the *Distributor's* response, the *customer* has a right to refer the complaint to the Energy and Water Ombudsman (Victoria) Ltd or another relevant external dispute resolution body (to be specified by the *Distributor*). This information must be given in writing.
- (d) A *Distributor* must include information about the Energy and Water Ombudsman (Victoria) Ltd on any disconnection warning issued by the *Distributor*.
- (e) A person who is exempt from holding a *Distribution Licence* need not comply with this clause 10 where a process of dispute resolution is specified in the applicable exemption.

## 11. DEEMED DISTRIBUTION CONTRACT REQUIREMENTS

### 11.1 Customer obligations

- (a) A term or condition notified by the *Distributor* in accordance with section 48(1) of *the Gas Industry Act* shall not be inconsistent with the *Gas Distribution System Code of Practice* to the extent that it provides that the *customer* must not:
- (i) allow *gas* supplied by the *Distributor* to the *customer's* supply address to be used at another supply address;

- (ii) take at the *customer's* supply address *gas* supplied to another supply address;
- (iii) supply *gas* to any other person unless permitted by *regulatory requirements* or agreed by the *Distributor*;

**Gas Distribution System Code of Practice 1 March 2022 Version 15**

---

- (iv) tamper with, or permit tampering with, the *meter* or associated equipment;
  - (v) bypass, or allow *gas* supplied to the supply address to bypass the *meter*;
  - (vi) allow *gas* supplied under a residential tariff to be used for non-residential purposes other than home offices;
  - (vii) allow *gas* supplied under a specific purpose tariff to be used for another purpose;
  - (viii) allow a person, other than a person who is (to the best of the *customer's* knowledge) a *gas installer*, to perform any work on the *gas installation*;
  - (ix) use the *gas* supply in a manner that may:
    - A. interfere with the *Distributor's distribution system* or with supply to any other *gas installation*; or
    - B. cause damage or interference to any third party; or
  - (x) interfere, or knowingly allow interference, with the *Distributor's distribution system* or any metering equipment at the supply address, except as may be permitted by law.
- (b) A term or condition notified by the *Distributor* in accordance with section 48(1) of the Gas Industry Act shall not be inconsistent with the *Gas Distribution System Code of Practice* to the extent, that it provides that a *customer* must:
- (i) provide the *Distributor* and its equipment safe, convenient and unhindered access to the *customer's* supply address for:
    - A. *connection* or disconnection of supply;
    - B. inspection or testing of *gas installations* or *metering installations*;
    - C. undertaking inspection, repairs, testing or maintenance of the *distribution system*; and
    - D. collection of *metering data*,

in accordance with the provisions of the *Gas Distribution System Code of Practice*;

(ii) maintain the *gas installation* at the *customer's* supply address in a safe condition;

(iii) protect the *Distributor's* equipment at the *customer's* supply address from damage and interference;

(iv) inform the *Distributor* as soon as possible if there is any:

31

## Gas Distribution System Code of Practice 1 March 2022 Version 15

---

A. change to the major *gas* usage purpose of the *Customer's* supply address; B.

change affecting access to metering equipment;

C. quality or safety of the supply of *gas* to the *customer* or any other person; or

D. *gas* leak or other problem with the *Distributor's* distribution system.

(v) take reasonable precautions to minimise the risk of loss or damage to any equipment, premises or business of the *customer* which may result from poor quality or reliability of *gas* supply.

(c) If required by the *Distributor*, a *customer* must provide estimated *gas* load information for its proposed use at the proposed supply address.

(d) If a *User* finds evidence of tampering with a *metering installation* it must notify that fact immediately to the *Distributor*.

(e) The cost of inspecting and testing *metering installations* or *connections* are to be borne by the *Distributor*, unless the inspection reveals that the *customer* is in breach of a *Regulatory Instrument*, in which case the *customer* will be responsible for the reasonable costs of the inspection.

### 11.2 Distributor obligation

(a) A *Distributor* must include a condition in its deemed distribution contract to the effect that it will comply with its obligations in respect of the *customer* as set out in the *Gas Distribution System Code of Practice*.

### 11.3 Liability

(a) A *Distributor* must not include any term or condition in its deemed distribution contract with a *customer* the effect of which is to limit the liability of the *Distributor* to the *customer*:

(i) for any breach by the *Distributor* of the contract; and

(ii) for any negligence by the *Distributor* in relation to the contract.

(b Clause 11.3(a) does not prevent the inclusion of a term or condition in the deemed distribution contract:

(i) of the sort contemplated by section 68A of the *Trade Practices Act 1974* (Cth) or section 97 of the *Goods Act 1958* (Vic) or any other similar statutory provision;

(ii) under which the *customer* acknowledges the extent of the *Distributor's* responsibility for the quality and reliability of *gas* supply under their contract; or

(iii) confirming that, under the contract, there is no variation or exclusion to the operation of sections 232 or 233 of the *Gas Industry Act* or section 33 of the *Gas Safety Act 1997* (if that is the case).

## **11.4 Indemnity**

(a) A *Distributor* must not include an indemnity or other term or condition in its deemed distribution contract with a *customer* the effect of which is to entitle the *Distributor* to recover from the *customer* in respect of:

(i) any breach by the *customer* of the contract; or

(ii) any negligence by the *customer* in relation to the contract,

any greater amount than that which, under the common law (including in equity) or statute, the *Distributor* is entitled to as compensation for the *customer's* breach of contract or negligence.

## **12. OTHER MATTERS**

### **12.1 Customer information**

A *Distributor* must comply with the *Privacy Act 1988* (Cth) as well as any guidelines issued by the *Commission* in relation to the treatment of *customer* information.

### **12.2 Distributors permitted to subcontract functions**

A *Distributor* may contract with another person to perform the *Distributor's* functions under the *Gas Distribution System Code of Practice*, but if so the *Distributor* remains responsible for



ensuring that those functions are performed.

### 12.3 Adjustment of network charges

- (a) A *Distributor* is not permitted to recover charges from a *Retailer* if the *Retailer* is not permitted to recover those charges from a *Small customer* under the *Energy Retail Code of Practice*.
- (b) Subclause (a) does not apply where the reason the *Retailer* is not permitted to recover charges is the result of some fault of the *Retailer*.
- (c) Subject to subclause (a), a charge that may be imposed by a *Distributor* and included in a statement of charges provided to a *Retailer* may be adjusted to account for:

33

### Gas Distribution System Code of Practice 1 March 2022 Version 15

---

- (i) differences between estimated meter readings used for the purposes of a statement and *metering data* obtained after the issue of the statement; and
- (ii) any error in, or correction or substitution of:
  - A. *metering data*; or
  - B. any other amount or factor that affects the calculation of the charges that may be imposed by a *Distributor*.
- (d) An adjustment under subclause (c) may be made by a *Distributor* by including, in a subsequent statement of charges, the amount required to be paid by, or credited to, the *Retailer* together with an explanation of the adjustment.

## 13. GLOSSARY AND INTERPRETATION

### 13.1 Glossary

<i>acceptance testing</i>	The testing and setting conducted by a manufacturer or installer on a <i>meter</i> , <i>corrector</i> or <i>metering installation</i> to establish the initial calibration of the <i>meter</i> , <i>corrector</i> or <i>metering installation</i> .
<i>Access Arrangement</i>	The arrangement for third party access to a <i>distribution pipeline</i> that has been approved by the <i>Commission</i> pursuant to the <i>Access Code</i> .
<i>Access Code</i>	The Natural Gas Third Party Access Code in force pursuant to the Gas Pipelines Access (Victoria) Act 1998 (Vic).
<i>AEMO</i>	The Australian Energy Market Operator Limited, ABN 94 072 010 327.

<i>Affected Party</i>	A person who may be affected by the possible inaccuracy of a <i>metering installation</i> or <i>metering data</i> from that <i>metering installation</i> .
<i>AS/NZS 4944</i>	Australian Standard AS/NZS 4944:2006 Gas Meters – In-service compliance testing, as amended from time to time.
<i>Australian Standards</i>	The Australian Standards set out in schedule 3 and all other Australian Standards relevant to <i>distribution systems</i> , or otherwise applicable to the operation of this <i>Gas Distribution System Code of Practice</i> , as set out in the most recent edition of a standard publication by Standards Australia (Standards Association of Australia).
<i>augmentation</i>	The 3.1 or enhancement of a <i>distribution pipeline</i> .
<i>basic meter</i>	A <i>meter</i> without a <i>data logger</i> .
<i>basic metering data</i>	Data obtained from a <i>basic metering installation</i> .
<i>basic metering installation</i>	A <i>metering installation</i> without a <i>data logger</i> .
<i>business day</i>	A day other than a Saturday or a Sunday or a day which has been proclaimed to be a public holiday in Victoria.
<i>Commission</i>	The Essential Services Commission established under the Essential Services Commission Act 2001 (Vic).
<i>confirmation reminder notice</i>	See clause 4A.6

**Gas Distribution System Code of Practice 1 March 2022 Version 15**

<i>connection</i>	The joining of a <i>gas installation</i> to a <i>distribution supply point</i> to allow the flow of <i>gas</i> .
<i>corrector</i>	A device which adjusts uncorrected quantity of <i>gas</i> from actual to standard conditions for billing and other purposes.
<i>Covered Pipeline</i>	Has the same meaning as in the <i>Access Code</i> .
<i>customer</i>	In relation to a supply of <i>gas</i> from a <i>distribution supply point</i> , the person to whom the <i>Distributor</i> delivers <i>gas</i> through its <i>distribution system</i> at that <i>distribution supply point</i> and includes a person who has sought <i>connection</i> to the <i>distribution system</i> as a <i>customer</i> .
<i>data logger</i>	A device that collects and stores data relating to the quantity, <i>density, composition</i> , temperature <del>and</del> or pressure of <i>gas</i> and is capable of either:  (a) transferring recorded data to a portable reading device; or (b) being accessed electronically by AEMO through a data

	collection system.
<i>deregister</i>	The removal or modification of <i>life support customer details</i> from a <i>register of life support customers and residents</i> so as to indicate that a <i>customer</i> is no longer a <i>life support customer</i> .
<i>deregistration notice</i>	A written notice issued by a <i>Distributor</i> to inform a <i>customer</i> that their <i>life support customer details</i> will be removed from the <i>register of life support customers and residents</i> if the <i>customer</i> does not provide <i>medical confirmation</i> by the date specified in that <i>deregistration notice</i> .
<i>dispute</i>	A dispute or difference which arises under the <i>Gas Distribution System Code of Practice</i> .
<i>Distribution Licence</i>	A licence to provide <i>distribution services</i> by means of a <i>distribution pipeline</i> granted to the <i>Distributor</i> by the <i>Commission</i> under the <i>Gas Industry Act</i> .
<i>distribution pipeline</i>	Any <i>pipeline</i> which has a maximum allowable operating pressure of up to 1050 <i>kPa</i> gauge (including pipelines for the reticulation of TLPG) and any other <i>pipelines</i> which: <ul style="list-style-type: none"> <li>• have a maximum allowable operating pressure greater than 1050 <i>kPa</i> gauge;</li> <li>• are functionally a <i>distribution pipeline</i> in nature (ie. few inputs and many closely spaced outputs);</li> </ul> and through which the <i>Distributor</i> transports <i>gas</i> to <i>customers</i> .
<i>distribution service</i>	The service of receipt of <i>gas</i> at <i>transfer points</i> , haulage of the <i>gas</i> through the <i>distribution system</i> and delivery of the <i>gas</i> at <i>distribution supply points</i> .
<i>distribution supply point</i>	A point on a <i>distribution system</i> at which <i>gas</i> is withdrawn from the <i>distribution system</i> for delivery to a <i>customer</i> which is normally located at: <ul style="list-style-type: none"> <li>• the inlet of a <i>gas installation</i> of a <i>customer</i>;</li> <li>• the outlet of a <i>meter</i>; or</li> <li>• the end of a <i>main</i>;</li> </ul>

	and includes a “supply point” and an “ancillary supply point” as defined in the <i>Gas Industry Act</i> in relation to a <i>distribution system</i> .
<i>distribution system</i>	Means a network of pipes, meters and controls which the <i>Distributor</i> uses to supply <i>gas</i> .

<i>Gas Distribution System Code of Practice</i>	The code of practice of that name, either made by the <i>Commission</i> , or taken to have been made, under Part 6 of the Essential Services Commission Act 2001, as amended by the <i>Commission</i> from time to time.
<i>Distributor</i>	A person who holds a <i>Distribution Licence</i> under the <i>Gas Industry Act</i> .
<i>Distributor planned interruption</i>	An <i>interruption</i> under clause 9.1(e).
<i>emergency</i>	<p>An event or circumstance:</p> <ul style="list-style-type: none"> <li>• which the Governor in Council declares by proclamation to be an emergency under Part 6A of the <i>Gas Industry Act</i>; • which it would be reasonable to believe constitutes a situation which may: <ul style="list-style-type: none"> <li>○ threaten the personal safety of any person;</li> <li>○ cause material damage to the <i>transmission system</i>; ○ cause material damage to the <i>distribution system</i> and thereby impact on the operation of the <i>transmission system</i>; or</li> <li>○ cause material damage to any property, plant or equipment; or</li> </ul> </li> <li>• which constitutes a level two to level four emergency (as set out in the emergency command organisation arrangements adopted by the <i>Distributor</i>).</li> </ul>
<i>Energy Retail Code of Practice</i>	The code of practice of that name either made by the <i>Commission</i> , or taken to have been made, under Part 6 of the Essential Services Commission Act 2001, as amended by the <i>Commission</i> from time to time.
<i>error limits</i>	The limits within which the components of <i>metering installations</i> affecting metering must be calibrated to be accurate as set out in Schedule 1, Part B.
<i>ESV</i>	Energy Safe Victoria established under the Energy Safe Victoria Act 2005 (Vic).
<i>Expansion</i>	<p>The process of upgrading capacity or service potential of a <i>distribution pipeline</i> by:</p> <p>(a) replacing or enhancing existing plant or equipment; or  (b) adding new plant or equipment.</p>
<i>explicit informed consent</i>	Means consent given in accordance with subclause 4A.11.
<i>Extensions/Expansions Policy</i>	A policy contained in an <i>Access Arrangement</i> setting out a method for determining whether an extension or expansion to the <i>Covered Pipeline</i> is or is not to be treated as part of the <i>Covered Pipeline</i> for the purposes of the <i>Gas Distribution System Code of Practice</i> .

<i>force majeure</i>	<p>An event beyond the reasonable control of a person which causes a delay in performance, or non-performance by that person of an obligation and includes:</p> <p>(a) an <i>emergency</i>;</p> <p>(b) a force majeure event as set out in the <i>Market Rules</i>; and</p> <p>(c) an event consisting of, or analogous to:</p> <p style="padding-left: 40px;">(i) the issue by <i>ESV</i> of a direction under Section 106 or 107 of the Gas Safety Act 1997 (Vic); or</p> <p style="padding-left: 40px;">(ii) an act of nature, governmental intervention or act of war, neither anticipated nor controllable by the <i>Distributor</i>.</p>
<i>gas</i>	Natural gas as defined in the <i>Gas Industry Act</i> which meets the <i>prescribed standards of quality</i> and other requirements prescribed under the Gas Safety Act 1997 (Vic) and includes natural gas that has been injected into and stored in a <i>storage facility</i> and, where applicable, <i>TLPG</i> .
<i>gas full commencement date.</i>	1 July 2020.
<i>Gas Industry Act</i>	The Gas Industry Act 2001 (Vic).
<i>gas installation</i>	Any <i>gas</i> equipment located at a <i>customer's</i> premises that is not part of a <i>distribution system</i> .
<i>gas installer</i>	A person authorised under relevant <i>regulatory requirements</i> to install, repair, alter or make any addition to a <i>gas installation</i> or to any part of a <i>gas installation</i> .
<i>GJ</i>	“Gigajoule”, being one thousand million Joules (1,000,000,000j).
<i>Guaranteed Service Levels or GSLs</i>	The levels of service in connection with the <i>distribution</i> of <i>gas</i> to <i>customers</i> set out in Schedule 1, Part E to the <i>Gas Distribution System Code of Practice</i> .
<i>Guaranteed Service Level payments</i>	The amounts in connection with the non-performance of the <i>Guaranteed Service Levels</i> set out in Schedule 1, Part E to the <i>Gas Distribution System Code of Practice</i> .
<i>HHV</i>	Higher Heating Value being the gross heating value of a <i>standard cubic metre of gas</i> .
<i>installation database</i>	The database of calibration data which a <i>Distributor</i> is required to keep in respect of its <i>metering installations</i> pursuant to the <i>Gas Distribution System Code of Practice</i> .
<i>interruption</i>	Means a <i>Distributor planned interruption</i> or an <i>unplanned interruption</i> .

<i>interval meter</i>	A meter with a data logger.
<i>interval metering installation</i>	A metering installation with a data logger.
<i>kPa</i>	“Kilopascal” and is equal to one thousand pascals as defined in Australian Standard AS1000-1979 “The International System of Units (SI) and its Application” and, unless otherwise specified, refers to a gauge pressure in excess of the atmospheric pressure.
<i>Large Customer</i>	A customer who has taken, or is likely to take, an aggregate supply from a <i>distribution supply point</i> of more than 5,000 gigajoules in any year.

**Gas Distribution System Code of Practice 1 March 2022 Version 15**

<i>life support customer</i>	Means a customer who is a <i>life support resident</i> or a customer at whose premises a <i>life support resident</i> (who is not the customer) resides or intends to reside.
<i>life support customer details</i>	In relation to a customer means: <ul style="list-style-type: none"> <li>(i) information that evidences that the customer is a <i>life support customer</i>;</li> <li>(ii) the personal details of each <i>life support resident</i> residing or intending to reside at the premises of the <i>life support customer</i>; and</li> <li>(iii) the date from which <i>life support equipment</i> is required at the premises of the <i>life support customer</i> by each <i>life support resident</i>.</li> </ul>
<i>life support equipment</i>	Has the meaning given by section 48DC of the <i>Gas Industry Act</i> .
<i>life support protections</i>	Means the protections against disconnection of a <i>life support customer</i> under Part 2, Division 4AA of the <i>Gas Industry Act</i> and clause 4A.7 of this Code of Practice.
<i>life support resident</i>	Means a person who requires <i>life support equipment</i> .
<i>main</i>	A low, medium or high pressure pipe in the <i>distribution system</i> , other than a <i>service pipe</i> .
<i>market participant</i>	A person who is registered with AEMO under the <i>Market Rules</i> as a market participant.
<i>market rules</i>	The Market and System Operations Rules published by the Governor in Council by Order in the Government Gazette under the <i>Gas Industry Act</i> .
<i>medical confirmation</i>	Certification in a <i>medical confirmation form</i> from a registered medical practitioner that a person residing or intending to reside at a customer’s supply address requires <i>life support equipment</i> .

<i>medical confirmation form</i>	A written form, issued by a <i>Distributor</i> to enable the customer to provide <i>medical confirmation</i> to the <i>Distributor</i> .
<i>meter</i>	An instrument that measures the <i>quantity</i> of <i>gas</i> passing through it and includes associated equipment attached to the instrument to filter, control or regulate the flow of gas.
<i>meter family</i>	For <i>meters</i> covered in AS/NZS 4944, a <i>meter</i> family is a group of <i>meters</i> defined as a population in AS/NZS 4944 and grouped in accordance with the requirements in AS/NZS 4944.  For <i>meters</i> not covered in AS/NZS 4944, a <i>meter</i> family is a group of <i>meters</i> in which: <ul style="list-style-type: none"> <li>a) all <i>meters</i> have been made to the same specifications by the same manufacturer;</li> <li>b) there are no significant differences in components or materials between the <i>meters</i>; and</li> <li>c) all the <i>meters</i> have been sealed with the same date code.</li> </ul>
<i>metering data</i>	The measure of quantity of gas flow obtained from a <i>metering installation</i> .

<i>metering installation</i>	The <i>meter</i> and associated equipment and installations, which may include <i>correctors</i> , regulators, filters, <i>data loggers</i> and telemetry relating to a <i>distribution supply point</i> .
<i>NATA</i>	National Association of Testing Authorities, Australia.
<i>non-declared transmission system</i>	A <i>transmission system</i> that is not part of the <i>gas transmission system</i> operated by <i>AEMO</i> .
<i>pipeline</i>	As defined in the Gas Pipelines (Victoria) Act 1998 (Vic) and does not include a <i>storage facility</i> .

<i>pipeline equipment</i>	In relation to a <i>pipeline</i> :  (a) equipment for inducing or facilitating the flow or movement of gas through the <i>pipeline</i> ; (b) equipment or structure for giving protection or support to the <i>pipeline</i> ; (c) equipment for transmitting information or instruction with regard to the operation of the <i>pipeline</i> ; (d) valves, valve chambers, manholes, inspection pits and other similar equipment or facilities annexed to or adjoining or forming part of the <i>pipeline</i> ; and (e) equipment for metering the flow or movement of gas or energy through the <i>pipeline</i> or any point on the <i>pipeline</i> .
<i>prescribed standards of quality</i>	The standards of quality and other requirements for <i>gas</i> set out in or as prescribed under the Gas Safety Act 1997 (Vic).
<i>Reconciliation Amount</i>	An amount calculated in accordance with Schedule 1, Part C of the <i>Gas Distribution System Code of Practice</i> .
<i>register of life support customers and residents</i>	Means a register established, maintained and kept up to date in accordance with clauses 4A.3 and 4A.13 of this Code of Practice.
<i>registered life support customer</i>	Means, in relation to a <i>Distributor</i> , a <i>life support customer</i> who is registered in the <i>register of life support customers and residents</i> established, maintained and kept up to date by that <i>Distributor</i> .
<i>regulatory instrument</i>	As defined in the <i>Access Code</i> and any contract between a <i>Distributor</i> and a <i>Retailer</i> or <i>customer</i> dealing with a matter referred to in clause 1.2 of the <i>Gas Distribution System Code of Practice</i> .

<i>regulatory requirements</i>	Any applicable Commonwealth, Victorian or local law, subordinate legislation, legislative instrument or mandatory regulatory requirement including industry codes and standards.
<i>residential customer</i>	A <i>customer</i> who uses gas primarily for domestic purposes.
<i>Retail Licence</i>	A licence to sell gas granted to a <i>Retailer</i> by the <i>Commission</i> under section 26 of the <i>Gas Industry Act</i> .



<i>Retail Rules</i>	Retail gas market rules as detailed in Division 2 of the <i>Gas Industry Act</i> .
<i>Retailer</i>	A person authorised to sell <i>gas</i> under a <i>Retail Licence</i> issued by the <i>Commission</i> under the <i>Gas Industry Act</i> .
<i>service pipe</i>	A pipe ending at a <i>metering installation</i> or, for an unmetered site a <i>gas installation</i> , which connects a <i>main</i> or a transmission <i>pipeline</i> to <i>customer's</i> premises, as determined by a <i>Distributor</i> .
<i>Small customer</i>	Has the meaning given to it in the <i>Energy Retail Code of Practice</i> .
<i>Standard cubic metre (scm) of gas</i>	The quantity of dry <i>gas</i> at 15 degrees Celsius temperature and 101.325 <i>kPa</i> absolute pressure enclosed in a volume of one cubic metre.
<i>Standard metering installation</i>	The least overall cost, technically acceptable <i>meter</i> able to measure and record the quantity of <i>gas</i> that is reasonably expected to be consumed by a <i>customer</i> at a <i>distribution supply point</i> at a metering pressure of 1.1 <i>kPa</i> , and for <i>meters</i> with a capacity in excess of a nominal 6m <sup>3</sup> /hr, at an hourly load factor of at least 5%.
<i>storage facility</i>	A facility for the storage of large quantities of <i>gas</i> , including liquid <i>gas</i> storage services and underground storage services.
<i>TLPG</i>	Tempered liquefied petroleum gas, being a mixture of vaporised commercial propane and air.
<i>transfer point</i>	A point at which the custody of <i>gas</i> is injected from a <i>transmission system</i> into a <i>distribution system</i> or from a <i>distribution system</i> into a <i>distribution system</i> .
<i>transmission pipeline</i>	Any <i>pipeline</i> which has a maximum allowable operating pressure of greater than 1050 <i>kPa</i> gauge and is not a <i>distribution pipeline</i> .
<i>transmission system</i>	A <i>pipeline</i> or a system of <i>pipelines</i> , for the high pressure transmission of <i>gas</i> operated by <i>AEMO</i> principally in Victoria, and all related facilities, together with: <ul style="list-style-type: none"> <li>(1) all structures for protecting or supporting the <i>pipeline</i> or system of <i>pipelines</i>;</li> <li>(2) facilities for the compression of <i>gas</i>, the maintenance of the <i>pipeline</i> or system of <i>pipelines</i> and the injection or withdrawal of <i>gas</i>;</li> </ul>

	<p>(3) all fittings, appurtenances, appliances, compressor stations, odourisation plants, scraper stations, valves, telemetry systems (including communications towers) and works and buildings used in connection with the <i>pipeline</i> or <i>system of pipelines</i>;</p> <p>but excluding all <i>storage facilities</i> and <i>distribution systems</i>.</p>
<i>type testing</i>	The testing conducted to establish the fitness for purpose of a new <i>metering installation</i> type.
<i>unaccounted for gas</i>	The difference between the amount of gas injected into the <i>distribution system</i> at all <i>transfer points</i> and the amount of gas withdrawn from the <i>distribution system</i> at all <i>distribution supply points</i> , including but not limited to leakage or other actual losses, discrepancies due to metering inaccuracies and variations of temperature, pressure and other parameters.
<i>unaccounted for gas benchmark</i>	The benchmark rate for each <i>Distributor</i> in relation to the rates of flow of gas as set out in Schedule 1, Part C of the <i>Gas Distribution System Code of Practice</i> .
<i>unplanned interruption</i>	<p>A temporary unavailability or curtailment of the supply of gas to carry out unanticipated or unplanned maintenance or repairs in circumstances where:</p> <p>(a) there is a need to reduce the risk of damage to persons or property; or</p> <p>(b) a <i>force majeure</i> event occurs which affects the <i>Distributor's</i> ability to deliver gas;</p> <p>(c) where the <i>Distributor</i> is directed to disconnect supply under clause 4.1(a)(iii) of this Code of Practice.</p>
<i>User</i>	<i>A market participant, Retailer, or a customer</i> who has a contract for <i>distribution services</i> with the <i>Distributor</i> .
<i>year</i>	A calendar year or a period commencing on 1 July in a calendar year and terminating on 30 June in the following calendar year.

---

**13.2 [Not used]**



## SCHEDULE 1

### PART A DISTRIBUTION SYSTEM PRESSURE

A *Distributor* must use all reasonable endeavours to maintain sufficient *distribution system* pressures to ensure the minimum pressure is maintained at the *distribution supply point*. The typical indicative daily pressure for each category of *distribution system* is as follows:

<i>Distribution System</i>	<b>Distribution System Pressure (kPa gauge)</b>		
	<b>Maximum</b>	<b>Minimum at <i>Distribution Delivery Point</i></b>	
		<b>Fringe Point # Outlet of Meter *</b>	
<b>Low Pressure</b>	7	1.4	1.1
<b>Medium</b>	20-210	15	1.1
<b>Pressure High</b>	515	140	1.1
<b>Pressure 1</b>	1050	600	1.1
<b>High Pressure 2</b>	Maximum	On application	
<b>Transmission</b>	allowable		
<b>Pressure</b>	operating pressure under the Pipeline Licence		

\* Or other such value where a higher supply pressure has been agreed.

# Note: Network operators may use lower distribution system pressures during periods of low demand (eg overnight) to minimise *unaccounted for gas* and where the operator can demonstrate that quality and reliability of supply can be maintained at those pressures.

### PART B MAXIMUM ALLOWABLE ERROR LIMITS

Unless specified in clause 7.2.3 the maximum allowable variance (error Units) in quantity from the agreed true quantity for *gas meters* shall be:

(a) not more that 2 percent in favour of the *Distributor*;

(b) not more that 3 percent in favour of the *customer*.

The maximum allowable error limit range for *correctors* shall be  $\pm 1\%$  in addition to the error limits outlined in (a) and (b) above.

Except where provided for in a sampling plan approved by the Commission, the error limit range of *meters* and *correctors* shall be established under standard conditions at (1) 20% and

(2) 100% of the badge capacity of the *meter*, by a testing agency approved by the *Commission*.

The testing procedures for *gas meters* and *correctors* shall have an uncertainty limit of no more than 1%.

Note: Testing of *meter families* (field life extension) under clause 7.2(c) must be conducted in accordance with a sampling plan approved by the *Commission*.

## PART C UNACCOUNTED FOR GAS

### C1 Unaccounted for gas benchmarks – effective from and including 1 January 2018

<250,000 GJ/pa

Class A benchmarks

>= 250,000 GJ/pa

Class B

benchmarks

2018-2022 2018-2022

Distributor

**Gas Distribution System Code of Practice 1 March 2022 Version 15**

---

**Australian Gas Networks (Victoria) 0.040 0.003 Australian Gas Networks**

**(Albury) 0.040 0.001**

**Multinet 0.053 0.003 AusNet Services 0.046 0.003**

**Non-Declared Transmission System networks – Class A and Class B benchmarks**

**Distributor 2018-2022**

**Australian Gas Networks** 0.020

**Multinet** 0.020

**AusNet Services** 0.049

### **C2 Reconciliation Amount**

The Reconciliation Amount is:  $(X+Y) \times (B-A)$

Where:

X = the quantity annual price of Gas, using spot and contract prices and quantities, as determined by AEMO for the previous calendar year expressed in \$ per gigajoule;

Y = the average transmission tariff for the previous calendar year expressed in \$ per gigajoule as calculated under the transmission provider's prevailing reference tariffs;

$$A = D - (E/(1-G))$$

Where:

D = the quantity of Gas withdrawn from the Transmission System by the Distributor for Retailer at the Connection Points for the previous calendar year;

E = the quantity of Gas withdrawn by Distributor for Retailer at all Class A Supply Points for the previous calendar year.

$$B = H/(1-F)$$

H = the quantity of Gas withdrawn by Distributor for Retailer at all Class B Supply Points for the previous calendar year;

F = the benchmark flow rate for Gas for Class B Supply Points set out above.

G = the benchmark flow rate of Gas for Class A Supply Points set out above.

## PART D HEATING VALUE

### Interim Provisions 1 October 1999

#### 1. NON-DAILY METERED CUSTOMERS

AEMO will monitor and declare a daily ~~state-wide~~ flow-weighted average (*HHV*) heating value for gas for all non-daily metered *gas customers by customer zone*, excluding nominated zones (see derogations for new areas - Mildura, East Coast, Western System etc).



## 2. DAILY METERED CUSTOMERS

Unless otherwise agreed between *market participants (customer, Retailer and Distributor)* the declared AEMO zonal hourly “flow-weighted average” (*HHV*) heating value for *gas* shall be applied for the purposes of billing settlements.

## PART E GUARANTEED SERVICE LEVELS

Area of service	Threshold to incur GSL payment <sup>a</sup>	GSL payment amount
Appointments <sup>b</sup> appointment window: <i>Customer</i> present – 2 hours	Failure to attend appointment within agreed	<i>Customer</i> absent – agreed date
	Connections <sup>c</sup>	Failure to connect a <i>customer</i>

within 1 day of agreed date	\$50 per event
Repeat interruptions <sup>d</sup> Unplanned interruptions to a <i>customer</i> in a calendar year period resulting from faults in the <i>distribution system</i> :	\$80 per day (subject to a maximum of \$240)
Upon fifth interruption	
Upon tenth interruption	\$150
Lengthy interruptions <sup>e</sup> Gas supply interruption to a <i>customer</i> not restored:	additional \$150
within 12 hours	
within 18 hours	\$150
	additional \$150

<sup>a</sup> GSL scheme applies to tariff V customers only.

<sup>b</sup> An appointment window of two hours applies if the customer is required or requests to be present. A one day appointment window applies if the customer is not required or does not request to be present. Appointments rescheduled by the Distributors are counted as missed appointments. Appointments rescheduled at the request of the customer are excluded from payments.

<sup>c</sup> Excluding if the Distributor is unable to gain access to the installation site.

<sup>d</sup> Excluding force majeure, faults in gas installations, transmission faults, upstream events and third party events.

<sup>e</sup> Excluding force majeure, faults in gas installations, transmission faults, upstream events and third party events impacting large diameter mains affecting more than 50 customers. Large diameter mains are high pressure mains of nominal diameter 100 mm or greater, and medium pressure or low pressure mains of nominal diameter 150 mm or greater.

## GUIDANCE ON CONNECTION CHARGES

### 1. Purpose and Limitation

The purpose of this Schedule is to provide guidance with respect to the determination of the charge component of the terms and conditions for the connection of a *customer's* gas installation to the Distributor's *distribution system* within the minor or infill extension area. Nothing in this Schedule shall override any contractual provision relating to the charge levied on a *customer* for connecting to the *distribution system* that existed prior to the commencement of this Schedule.

### 2. Required Approach

The principles for determining the charge to be paid by a *customer* for obtaining connection to the *distribution system* is dependent on the type of tariff to which that *customer* would be assigned once connected.

- (a) For Tariff V *customers* or *customers* who would be assigned to any tariff that succeeds part or all of the existing Tariff V tariff – the charge for obtaining connection to the *distribution system* shall be ~~the greater of the deficit from the application of the economic feasibility test or zero.~~ the incremental capital cost of installing the connection facilities dedicated to that *customer*. If multiple customers are being connected as part of a single project, where there are shared facilities, then the cost of those shared facilities should be shared equally on a per connection basis unless the customers concerned agree otherwise.

For Tariff V customers, the incremental capital cost of connection shall include the cost of mains extensions, provision of a service pipe and provision of a standard meter for the customer or group of customers. The cost associated with the provision of these facilities shall be computed as the direct cost incurred to purchase and install the facilities plus 10 per cent to reflect incremental overheads. Tariff V customers will not be charged any incremental cost associated with upstream reinforcement of the distribution system as this is assumed to be immaterial.

- (b) For Tariff D *customers* or *customers* who would be assigned to any tariff that succeeds part or all of the existing Tariff D tariff – the charge for obtaining connection to the *distribution system* shall be:

(i) the cost of installing and maintaining the connection facilities dedicated to that *customer*; and

(ii) a contribution to the reinforcement of the shared *distribution system* calculated as the greater of the deficit resulting from the application of the economic feasibility test or zero.

To the extent practicable, cost and revenue shall be calculated according to the incremental cost and revenue associated with the connection of a *customer* or group of *customers* to the distribution system. Incremental cost or revenue associated with a *customer* or group of *customers* means the revenue or cost that would be anticipated with the connection of that *customer* or group of *customers* less the revenue or cost that would be anticipated without the

connection of that customer or group of *customers*, both computed in present value terms. Further guidance on the estimation of incremental cost and revenue is set out below.

For the purpose of this Schedule, connection facilities dedicated to a *customer* mean those facilities that are used (or may be used) to transport *gas* to that *customer* and no other *customer*. The shared *distribution system* in relation to a *customer* refers to that part of the distribution

## Gas Distribution System Code of Practice 1 March 2022 Version 15

---

system that is used (or may be used) to transport *gas* to that *customer* that does not comprise dedicated facilities.

### 3. Definition of the Economic Feasibility Test

The economic feasibility test refers to the computation (in present value terms) of the revenue anticipated from the provision of the reference service to the *customer* and the cost anticipated associated with serving that *customer*. The deficit from the application of the economic feasibility test refers to the difference between cost and revenue.

$$\text{Deficit} = \text{PV (Cost)} - \text{PV (Revenue)}$$

where PV refers to a present value.

Nothing in this Guideline requires a Distributor to undertake an economic feasibility test in respect of a *customer* or group of *customers* if it does not intend to ~~charge a Tariff V *customer* or group of *customers* for obtaining connection to the *distribution system*, or to levy a contribution on a Tariff D *customer* or group of *customers* in respect of the reinforcement of the shared *distribution system*.~~

### 4. Estimation of Incremental Revenue and Cost

For Tariff V *customers* or *customers* who would be assigned to any tariff that succeeds part or all of the existing Tariff V tariff, **the economic feasibility test is not to be used.** ~~following assumptions should be adopted when applying the economic feasibility test (and hence computing whether a charge for connecting to the *distribution system* may be payable):~~

- ~~(a) Discount rate — the pre-tax real WACC included in the Distributor's approved access arrangement;~~
- ~~(b) Period of analysis — 20 years for domestic *customers* and 15 years for commercial and industrial *customers*. A different life for commercial and industrial customers may be used if there are grounds to consider that the life of the connection may be less than 15 years.~~
- ~~(c) Tariffs — the current approved reference tariffs shall be adjusted by the prevailing X factor until the end of the current regulatory period and constant in real terms thereafter.~~

~~(d) Quantities – a forecast based upon the reasonably anticipated usage for a *customer* or group of *customers* shall be used.~~

~~(e) Incremental capital costs – shall include the cost of mains extensions, provision of a service pipe and provision of a standard meter for the *customer* or group of *customers*. The cost associated with the provision of these facilities shall be computed as the direct cost forecast to be incurred to purchase and install the facilities plus 10 per cent to reflect incremental overheads. It shall be assumed that the incremental cost associated with upstream reinforcement of the distribution system is immaterial.~~

**Gas Distribution System Code of Practice 1 March 2022 Version 15**

---

~~(f) Incremental operating and maintenance costs – shall be assumed to be \$17 per annum in dollars as at July 2006. This figure may be escalated by an annual amount of 0.32 per cent to account for the rate of change per connection, and for inflation to convert it into an equivalent cost in the year in which the economic feasibility test is being undertaken using the method for adjusting for inflation that is employed for reference tariffs.~~

For Tariff D *customers* or *customers* who would be assigned to any tariff that succeeds part or all of the existing Tariff D tariff, the following assumptions should be adopted when computing the incremental cost associated with the connection facilities dedicated to that *customer*:

(g) Capital costs – the cost of providing and replacing these facilities shall include the direct cost incurred to purchase and install the facilities plus 10 per cent to reflect incremental overheads.

(h) Maintenance costs – charges for the ongoing maintenance of connection facilities dedicated to a *customer* shall be based upon the direct cost of performing those maintenance activities. No allowances for overheads or other items may be included.

For Tariff D *customers* or *customers* who would be assigned to any tariff that succeeds part or all of the existing Tariff D tariff, the following assumptions shall be adopted when applying the economic feasibility test (and hence computing whether a charge in respect of upstream reinforcement may be levied).

(i) Discount rate – the pre tax real WACC included in the Distributor’s approved access arrangement;

(j) Period of analysis – 15 years, although a different life may be used if there are grounds to consider that the life of the connection may be less than 30 years.

(k) Tariffs – the current approved reference tariffs shall be adjusted by the prevailing X factor until the end of the current regulatory period and constant in real terms thereafter.

(l) Quantities – a forecast based upon the reasonably anticipated usage for a *customer* shall be used.

- (m) Incremental capital costs – shall include the cost of installing additional upstream facilities only (that is, excluding assets dedicated to the *customer*). The cost associated with the provision of these facilities shall be computed as the direct cost forecast to be incurred to purchase and install the facilities plus 10 per cent to reflect incremental overheads.
- (n) Incremental operating and maintenance costs – shall be based upon reasonable forecasts of the direct cost of operating and maintaining the reinforced system less the direct cost of operating and maintaining the distribution system as it existed prior to the reinforcement. No allowances for overheads or other items may be included.

## **5. Provision of Information**

Where requested, quotes for connections shall be itemised to include at least the following information:

- (a) where relevant, assumption about the future usage by the customer or group of customers, and present value of incremental revenue;
- (b) in relation to a contribution for upstream reinforcement by a Tariff D customer, the assumptions about the incremental increase or reduction in operating and maintenance costs;
- (c) meter type and cost;
- (d) mains extension cost;
- (e) any other incidental costs; and
- (f) any upstream augmentation works and associated costs.

## **SCHEDULE 3**

### **AUSTRALIAN STANDARDS - GAS DISTRIBUTION**

Standard Number	Description
-----------------	-------------

<b>AS ISO 6993.1-2007</b>	Buried high impact poly (vinyl chloride) (PVC-Hi) piping systems to the supply of gaseous fuels-Pipes for a maximum operating pressure of 1 bar (100kpa) (ISO 6993.1-2006, Mod)
<b>AS ISO 6993.2-2007</b>	Buried high impact poly (vinyl chloride) (PVC-Hi) piping systems to the supply of gaseous fuels-Fittings for a maximum operating pressure of 20 mbar (20kpa)
<b>AS ISO 6993.2-2007</b>	Buried high impact poly (vinyl chloride) (PVC-Hi) piping systems to the supply of gaseous fuels-Fittings and Saddles for a maximum operating pressure of 1 bar (100kpa)
<b>AS ISO 14064-2018</b>	The ISO 14064 standard provides governments, businesses, regions and other organisations with a complementary set of tools for programs to quantify, monitor, report and verify GHG emission..
<b>AS 1697-2005</b>	Installation and maintenance of steel pipe system for gas

**Gas Distribution System Code of Practice 1 March 2022 Version 15**

<b>AS/NZS 4129:2000</b>	Fittings for Polyethylene (PE) Pipes for Pressure Applications
<b>AS/NZS 4130-2001</b>	Polyethylene (PE) Pipes for Pressure Applications
<b>AS/NZS 4131-2003</b>	Polyethylene (PE) Compounds for Pressure Pipes and Fittings
<b>AS 2885.1-2007</b>	Pipelines - Gas and liquid petroleum - Design and construction
<b>AS 2885.2-2007</b>	Pipelines - Gas and liquid petroleum - Welding
<b>AS 2885.3-2001</b>	Pipelines - Gas and liquid petroleum - Operation and maintenance
<b>AS 2885.4-2003</b>	Pipelines – Gas and liquid petroleum – offshore submarine pipeline systems

**Gas Distribution System Code of Practice 1 March 2022 Version 15**

<b>AS 2885.5-2002</b>	Pipelines – Gas and liquid petroleum – Field pressure testing
-----------------------	---

<b>AS 2943-2007</b>	Plastics pipes and fittings for gas reticulation - Polyamide compounds for manufacture
<b>AS 2944.1-2007</b>	Plastics pipes and fittings for gas reticulation - Polyamide - Pipes
<b>AS 2944.2-2007</b>	Plastics pipes and fittings for gas reticulation - Polyamide - Fittings
<b>AS 3723-1989</b>	Installation and maintenance of plastic pipe systems for gas
<b>AS/NZS 4130:2003</b>	Polyethylene (PE) Pipes for Pressure Applications.
<b>AS/NZS 4131:2003</b>	Polyethylene (PE) Compounds for Pressure Pipes and Fittings
<b>AS 4623-2004</b>	Jointing compounds and materials for use in gas pipe joints
<b>AS 2832.1-2004</b>	Cathodic Protection of Metals – Pipes and Cables
<b>AS 5601-2004</b>	Gas Installations
<b>AS 4645-2005</b>	Gas Distribution Network Management
<b>AS/NZS 4944:2006</b>	Gas Meters – In service Compliance Testing



