

GAS DISTRIBUTION SYSTEM CODE

(Version 12.0 effective from 1 January 2018)

Essential Services Commission Level 37, 2 Lonsdale Street Melbourne Vic 3000 Telephone (03) 9032 1300, facsimile (03) 9032 1301 Our reference: C/17/22074

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1. INTRODUCTION

1.1 To whom does the Distribution System Code apply?

The *Distribution System Code* applies to each *Distributor* as the holder of a *Distribution Licence* and as operator of a *distribution system*.

1.2 What is the purpose of the Distribution System Code?

The purpose of the *Distribution System Code* 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 commencement date of the revisions in Version 12.0 of the *Distribution System Code* is 1 January 2018.
- (b) The *Distribution System Code* operates and has effect under a *Distributor's Distribution Licence*.

1.4 Variation by written agreement

- (a) A *Distributor* or a *Large Customer* may seek a written agreement with the other party to expressly vary their respective rights and obligations under the *Distribution System Code*.
- (b) If such an agreement is sought, the *Large Customer* and the *Distributor* must negotiate in good faith.
- (c) When such an agreement is entered into, the *Distribution System Code* is deemed to apply to:
 - (i) that *Distributor* in relation to that *Large Customer*; and
 - (ii) that *Large Customer* in relation to that *Distributor*,

as varied by the agreement.

1.5 What do italicised words mean?

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

1.6 How is this Code to be interpreted?

The *Distribution System Code* must be interpreted according to the principles of interpretation set out at clause 13.2.

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 Distribution System Code to the extent to which it is within its power;

- (c) subject to the Distribution System Code, 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 *Distribution System Code*;
- (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.

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.

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 Distribution System Code.
- (b) 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.
- (c) Where the percentage volume of *unaccounted for gas* in a *year* is different to the *unaccounted for gas benchmark* a *Reconciliation Amount* is payable.
- (d) If the *Reconciliation Amount* is negative, the *Distributor* must pay the *Reconciliation Amount* to the respective *Retailer*.
- (e) 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 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 *Distribution System Code*
- Note: Clause 4 of the Gas Distribution Licence made pursuant to section 29(c) of the Gas Industry Act requires compliance with the Gas Distribution System Code. Pursuant to section 31(1) of the Gas Industry Act, if a 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 Gas 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 *Distribution System Code* or any *regulatory requirement*; or
 - (v) as set out in clause 9.
- (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 *Energy Retail Code* 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.

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*.
- (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.

5. METERING PROVISIONS

5.1 Scope

- (a) Clauses 5 to 8 set out the metering provisions of the *Distribution System Code*.
- (b) The metering provisions of the *Distribution System Code* 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 *Distribution System Code* 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:
 - (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 *Distribution System Code*;
 - (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 *Distribution System Code*.
- (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 5 *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 *Distribution System Code*. 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 subparagraph (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 3 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 subparagraph (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 Distribution System Code, 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 *Distribution System Code* 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 *Distribution System Code*; and
- (c) until the restoration or replacement of the *metering installation* in accordance with clause
 7.3(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 *Distribution System Code* 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
 - (iv) the *Affected Parties* (*AEMO* and the *Retailers*) are advised of the compensation 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

- 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 *Distribution System Code* 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, at least 10 days notice of which has been given to the *User*; 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 5 business days* to rectify the reason (the *5 business days* must be counted from the date of receipt of the notice); and
- (c) at the expiration of those 5 *business days* given to the *customer*, under clause 9.2(b) by way of a written disconnection warning, give the *customer* a further 5 *business days*' notice of its intention to disconnect the *customer* (the 5 *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 clause 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) 7 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 *Distribution System Code* 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;*
- (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 *Distribution System Code* 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 Distribution System Code;

- (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:
 - A. change to the major *gas* usage purpose of the *Customer's* supply address;
 - B. change affecting access to metering equipment;
 - C. proposed change to the *Customer's gas installation* which may affect the 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 *Distribution System Code*.

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 2001* 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 *Distribution System Code*, but if so the *Distributor* remains responsible for ensuring that those functions are performed.

13. GLOSSARY AND INTERPRETATION

13.1 Glossary

acceptance testing	The testing and setting conducted by a manufacturer or installer on a
	meter, corrector or metering installation to establish the initial
	calibration of the meter, corrector or metering installation.
Access Arrangement	The arrangement for third party access to a <i>distribution pipeline</i> that
	has been approved by the Commission pursuant to the Access Code.
Access Code	The Natural Gas Third Party Access Code in force pursuant to the
	Gas Pipelines Access (Victoria) Act 1998 (Vic).
AEMO	The Australian Energy Market Operator Limited, ABN 94 072 010
	327.
Affected Party	A person who may be affected by the possible inaccuracy of a
	metering installation or metering data from that metering installation.
AS/NZS 4944	Australian Standard AS/NZS 4944:2006 Gas Meters – In-service
	compliance testing, as amended from time to time.
Australian Standards	The Australian Standards set out in schedule 3 and all other
	Australian Standards relevant to distribution systems, or otherwise
	applicable to the operation of this Distribution System Code, as set
	out in the most recent edition of a standard publication by Standards
	Australia (Standards Association of Australia).

augmentation	The expansion or enhancement of a distribution pipeline.
basic meter	A meter without a data logger.
basic metering data	Data obtained from a <i>basic metering installation</i> .
basic metering installation	A metering installation without a data logger.
business day	A day other than a Saturday or a Sunday or a day which has been proclaimed to be a public holiday in Victoria.
Commission	The Essential Services Commission established under the Essential Services Commission Act 2001 (Vic).
connection	The joining of a <i>gas installation</i> to a <i>distribution supply point</i> to allow the flow of <i>gas</i> .
corrector	<i>A</i> device which adjusts uncorrected quantity of <i>gas</i> from actual to standard conditions for billing and other purposes.
Covered Pipeline	Has the same meaning as in the Access Code.
customer	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> .
data logger	 A device that collects and stores data relating to the quantity, temperature and 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.
dispute	A dispute or difference which arises under the <i>Distribution System</i> <i>Code</i> .
Distribution Licence	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>
distribution pipeline	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:
	 have a maximum allowable operating pressure greater than 1050 <i>kPa</i> gauge; are functionally a <i>distribution pipeline</i> in nature (ie. few inputs and many closely spaced outputs);
	and through which the <i>Distributor</i> transports gas to customers.

distribution service	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> .
distribution supply point	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:
	• the inlet of a <i>gas installation</i> of a <i>customer</i> ;
	• the outlet of a <i>meter; or</i>
	• the end of a <i>main;</i>
	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> .
distribution system	Means a network of pipes, meters and controls which the <i>Distributor</i> uses to supply <i>gas</i> .
Distribution System	The Distribution System Code as issued and amended by the
Code	<i>Commission</i> from time to time.
Distributor	A person who holds a <i>Distribution Licence</i> under the <i>Gas Industry Act</i> .
emergency	An event or circumstance:
	 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: threaten the personal safety of any person; 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 cause material damage to any property, plant or equipment; or
	• which constitutes a level two to level four emergency (as set out in the emergency command organisation arrangements adopted by the <i>Distributor</i>).
Energy Retail Code	The code of that name determined by the Commission under the <i>Electricity Industry Act</i> and the <i>Gas Industry Act</i> .
error limits	
	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.

ESV	Energy Safe Victoria established under the Energy Safe Victoria Act 2005 (Vic).
Expansion	The process of upgrading capacity or service potential of a <i>distribution pipeline</i> by:
	(a) replacing or enhancing existing plant or equipment; or(b) adding new plant or equipment.
Extensions/Expansions Policy	A policy contained in an <i>Access Arrangement</i> setting out a method for determining whether an extension or expansion to the <i>Covered</i> <i>Pipeline</i> is or is not to be treated as part of the <i>Covered Pipeline</i> for the purposes of the <i>Distribution System Code</i> .
force majeure	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:
	 (a) an <i>emergency;</i> (b) a force majeure event as set out in the <i>Market Rules;</i> and (c) an event consisting of, or analogous to:
	 (i) the issue by ESV of a direction under Section 106 or 107 of the Gas Safety Act 1997 (Vic); or (ii) an act of nature, governmental intervention or act of war, neither anticipated nor controllable by the <i>Distributor</i>.
gas	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> .
Gas Industry Act	The Gas Industry Act 2001 (Vic).
gas installation	Any <i>gas</i> equipment located at a <i>customer</i> 's premises that is not part of a <i>distribution system</i> .
gas installer	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> .
GJ	"Gigajoule", being one thousand million Joules (1,000,000,000j).
<i>Guaranteed Service</i> <i>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>Distribution System</i> <i>Code</i> .
Guaranteed Service Level payments	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>Distribution System Code</i> .
HHV	Higher Heating Value being the gross heating value of a <i>standard cubic metre of gas.</i>
installation database	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>Distribution System Code</i> .
interval meter	A meter with a data logger.
interval metering installation	A metering installation with a data logger.
kPa	 "Kilopascal" and is equal to one thousand pascals as defined in Australian Standard ASIOOO-1979 "The International System of Units (S1) and its Application" and, unless otherwise specified, refers to a gauge pressure in excess of the atmospheric pressure.
Large Customer	A <i>customer</i> 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.
main	A low, medium or high pressure pipe in the <i>distribution system</i> , other than a <i>service pipe</i> .
market participant	A person who is registered with <i>AEMO</i> under the <i>Market Rules as</i> a market participant.
market rules	The Market and System Operations Rules published by the Governor in Council by Order in the Government Gazette under the <i>Gas</i> <i>Industry Act</i> .
meter	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.
meter family	 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: a) all <i>meters</i> have been made to the same specifications by the same manufacturer; b) there are no significant differences in components or materials between the <i>meters</i>; and c) all the <i>meters</i> have been sealed with the same date code.

metering data	The measure of quantity of gas flow obtained from a <i>metering installation</i> .
metering installation	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> .
NATA	National Association of Testing Authorities, Australia.
non-declared transmission system	A <i>transmission system</i> that is not part of the <i>gas transmission system</i> operated by <i>AEMO</i> .
pipeline	As defined in the Gas Pipelines (Victoria) Act 1998 (Vic) and does not include a <i>storage facility</i> .
pipeline equipment	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 <i>gas</i> or energy through the <i>pipeline</i> or any point on the <i>pipeline.</i>
prescribed standards of quality	The standards of quality and other requirements for <i>gas</i> set out in or as prescribed under the Gas Safety Act 1997 (Vic).
Reconciliation Amount	An amount calculated in accordance with Schedule 1, Part C of the <i>Distribution System Code</i> .
regulatory instrument	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>Distribution System Code</i> .
regulatory requirements	Any applicable Commonwealth, Victorian or local law, subordinate legislation, legislative instrument or mandatory regulatory requirement including industry codes and standards.
residential customer	A customer who uses gas primarily for domestic purposes.

Retail Licence	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> .
Retail Rules	Retail gas market rules as detailed in Division 2 of the <i>Gas Industry Act</i> .
Retailer	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> .
service pipe	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> .
Standard cubic metre (scm) of gas	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.
Standard metering installation	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 $6m^3$ /hr, at an hourly load factor of at least 5%.
storage facility	A facility for the storage of large quantities of <i>gas</i> , including liquid gas storage services and underground storage services.
TLPG	Tempered liquefied petroleum gas, being a mixture of vaporised commercial propane and air.
transfer point	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> .
transmission pipeline	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> .
transmission system	A <i>pipeline</i> or a system <i>of pipelines</i> , for the high pressure transmission <i>of gas</i> operated by <i>AEMO</i> principally in Victoria, and all related facilities, together with:
	 all structures for protecting or supporting the <i>pipeline</i> or system of <i>pipelines;</i> 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 <i>of gas;</i> all fittings appurtenances appliances compressor stations
	 (3) all fittings, appurtenances, appliances, compressor stations, odorisation plants, scraper stations, valves, telemetry systems (including communications towers) and works and buildings

	used in connection with the <i>pipeline</i> or system of pipelines;
	but excluding all storage facilities and distribution systems.
type testing	The testing conducted to establish the fitness for purpose of a new <i>metering installation</i> type.
unaccounted for gas	The difference between the amount of gas injected into the
	distribution system at all transfer points and the amount of gas
	withdrawn from the distribution system at all distribution supply
	points, including but not limited to leakage or other actual losses,
	discrepancies due to metering inaccuracies and variations of
	temperature, pressure and other parameters.
unaccounted for gas	The benchmark rate for each <i>distributor</i> in relation to the rates of
benchmark	flow of gas as set out in Schedule 1, Part C of the Distribution System
	Code.
User	A market participant, Retailer, or a customer who has a contract for
	distribution services with the Distributor.
year	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 Principles of interpretation

These principles of interpretation apply to the Distribution System Code:

- (a) words importing the singular number include the plural number and words importing the plural number include the singular number;
- (b) words denoting one gender include any other gender;
- (c) words denoting persons only include natural persons, bodies corporate, unincorporated associations, firms, governments and any governmental agencies;
- (d) a reference to a person includes that person's executors, administrators, liquidators, successors and permitted assigns;
- (e) the headings are inserted for convenience only and do not affect the interpretation of the *Distribution System Code*;
- (f) a reference to any Act of Parliament or to any section or provision thereof extends to and includes any statutory modification or re-enactment thereof or any statutory provision substituted therefor;
- (g) unless expressed to the contrary, references to paragraphs, subclauses, clauses, attachments and schedules are references to paragraphs, subclauses, clauses, attachments and schedules of the *Distribution System Code*;
- (h) a reference to any agreement or document or regulatory instrument is a reference to that agreement or document or regulatory instrument as varied or amended from time to time and includes any schedules, annexures or attachments to the agreement or document;
- (i) a period of time:
 - which dates from a given day or the day of an act or event is to be calculated exclusive of that day; or
 - which commences on a given day or the day or an act or event is to be calculated inclusive of that day;

- (j) a reference to:
 - time is a reference to Standard Time within the meaning of the *Summer Time Act* 1972 (Vic) and not Summer Time within the meaning of that Act;
 - a day is a reference to a period commencing immediately after midnight and ending the following midnight and
 - a month is a reference to a calendar month;
- (k) an event which is required under the *Distribution System Code* to occur on or by a stipulated day which is not a business day may occur on or by the next business day; and
- (1) in deciding whether a *Distributor* has used its best endeavours, regard shall be had to relevant codes, good *gas* industry practice as defined in the *Distribution System Code* and other *regulatory requirements*, the performance of other *Distributors* and to interstate and international benchmarks.

The common seal of the Essential)
Services Commission was affixed)
pursuant to the authority of the)
Commission on 13 December 2017)

RON BEN-DAVID Chairperson

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:

Distribution System	Distribution System Pressure (<i>kPa</i> gauge)		
Category	Maximum	Minimum at Distribution Delivery Point	
		Fringe Point #	Outlet of Meter *
Low Pressure	7	1.4	1.1
Medium Pressure	20-210	15	1.1
High Pressure 1	515	140	1.1
High Pressure 2	1050	600	1.1
Transmission	Maximum allowable	On application	1.1
Pressure	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 ± 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 7.2.3 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

	Class B benchmarks <250,000 GJ/pa	Class A benchmarks >= 250,000 GJ/pa
Distributor	2018-2022	2018-2022
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

Version 12.0

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*, 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 ^a	GSL payment amount
Appointments b	Failure to attend appointment within agreed appointment window: <i>Customer</i> present – 2 hours	\$50 per event
	Customer absent – agreed date	
Connections ^c	Failure to connect a <i>customer</i> within 1 day of agreed date	\$80 per day (subject to a maximum of \$240)
Repeat interruptionsd	Unplanned interruptions to a <i>customer</i> in a calendar year period resulting from faults in the <i>distribution system</i> :	
	Upon fifth interruption	\$150
	Upon tenth interruption	additional \$150
Lengthy interruptions ^e	Gas supply interruption to a <i>customer</i> not restored:	
	within 12 hours	\$150
	within 18 hours	additional \$150

a GSL scheme applies to tariff V customers only.

^c Excluding if the distributor is unable to gain access to the installation site.

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

e 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.

b 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.

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.
- (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 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.

Deficit = PV(Cost) - 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 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.
- (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.
- 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.

AUSTRALIAN STANDARDS - GAS DISTRIBUTION

Standard Number	Description
AS ISO 6993.1-2007	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)
AS ISO 6993.2-2007	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)
AS ISO 6993.2-2007	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)
AS 1697-2005	Installation and maintenance of steel pipe system for gas

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

AS 2885.5-2002	Pipelines – Gas and liquid petroleum – Field pressure testing		
AS 2943-2007	Plastics pipes and fittings for gas reticulation - Polyamide compounds for manufacture		
AS 2944.1-2007	Plastics pipes and fittings for gas reticulation - Polyamide - Pipes		
AS 2944.2-2007	Plastics pipes and fittings for gas reticulation - Polyamide - Fittings		
AS 3723-1989	Installation and maintenance of plastic pipe systems for gas		
AS/NZS 4130:2003	Polyethylene (PE) Pipes for Pressure Applications.		
AS/NZS 4131:2003	Polyethylene (PE) Compounds for Pressure Pipes and Fittings		
AS 4623-2004	Jointing compounds and materials for use in gas pipe joints		
AS 2832.1-2004	Cathodic Protection of Metals – Pipes and Cables		
AS 5601-2004	Gas Installations		
AS 4645-2005	Gas Distribution Network Management		
AS/NZS 4944:2006	Gas Meters – In service Compliance Testing		

GAS DISTRIBUTION SYSTEM CODE CHANGE PROCEDURES

The following procedures apply to amendments to the *Distribution System Code* pursuant to section 31(1) and 38 of the *Gas Industry Act*.

- 1. Subject to clause 2, the *Distribution System Code* may be amended from time to time by the *Commission* applying the *Commission's* common seal to a document detailing the amendment.
- 2. Unless the *Commission* is satisfied on reasonable grounds that an amendment is urgently required, the *Commission* will not amend this *Distribution System Code* until:
 - (a) all *Distributors*, the *Commission*'s Customer Consultative Committee and other interested persons have been given a reasonable opportunity to make submissions to the *Commission* concerning the amendment; and
 - (b) those submissions are taken into account.
- 3. The date specified on the amendment must not be earlier than the date on which the amendment is made without the prior agreement from *Distributors* and the *Commission's* Customer Consultative Committee.
- 4. The *Commission* will notify all *Distributors*, the *Commission*'s Customer Consultative Committee and other interested persons of any amendment the *Commission* makes to the *Distribution System Code* in accordance with this Schedule 4.
- 5. A *Distributor* must inform a *customer* of any amendment to the Distribution System Code that materially affects the *customer's* rights and obligations as soon as reasonably practicable after the *Distribution System Code* is amended by the *Commission*.