

RETAIL MARKET PROCEDURES (VICTORIA)

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TABLE OF CONTENTS

CHAPTER 1	– GENERAL	1
1.1	GENERAL	1
1.2	GAS INTERFACE PROTOCOL	11
1.3	[DELETED]	13
1.3A	[DELETED]	13
1.4	CONFIDENTIALITY	13
1.5	[DELETED]	14
1.6	[DELETED]	14
1.7	MARKET AUDIT	14
CHAPTER 2	– TRADING PROCESSES	15
2.1	METER DATA DATABASE	15
2.2	METER READING	22
2.3	VALIDATION OF METER READINGS	23
2.4	ESTIMATED METER READINGS	24
2.5	SUBSTITUTED METER READINGS	25
2.6	CALCULATION AND PROVISION OF ENERGY DATA	26
2.7	DATA CHANGE	29
2.8	PROFILING	30
2.9	METER MANAGEMENT	32
CHAPTER 3	– MIRN DISCOVERY PROCESSES	36
3.1	MIRN DATABASE	36
3.2	MIRN DISCOVERY REQUEST	37
3.3	RESPONSE TO MIRN DISCOVERY REQUEST	38
3.4	ASSISTANCE IN SEARCHING	40
3.5	MIRN ALLOCATION	41
CHAPTER 4	– CUSTOMER TRANSFER PROCESSES	43
4.1	INITIATION OF TRANSFER	43
4.2	NOTIFICATION OF TRANSFER	45
4.3	OBJECTIONS TO TRANSFER	46
4.4	POTENTIAL PROBLEMS WITH TRANSFER	49
4.5	WITHDRAWAL OF TRANSFER REQUEST	50
4.5A	INELIGIBLE TRANSFERS	51
4.6	REGISTRATION OF PROSPECTIVE TRANSFER	52
4.7	REGISTRATION OF RETROSPECTIVE TRANSFER	56
4.8	REGISTRATION NOTIFICATION	57
CHAPTER 5	– CUSTOMER DATA	59
5.1	CUSTOMER DATA	59
CHAPTER 6	– RETAILER OF LAST RESORT	60

6.1	RETAILER OF LAST RESORT EVENT.....	60
CHAPTER 7	– DISTRIBUTION UNACCOUNTED FOR GAS.....	63
7.1	CALCULATION OF UNACCOUNTED FOR GAS AND DETERMINATION OF PAYMENTS.....	63
7.2	PUBLICATION OF DETERMINATION.....	63
7.3	PAYMENT.....	63
7.4	PROVISION OF INFORMATION.....	63
7.5	EXCLUSION.....	63
ATTACHMENT 1	– [DELETED].....	64
ATTACHMENT 2	– [DELETED].....	65
ATTACHMENT 3	– APPROVED VALIDATION METHODOLOGY.....	66
ATTACHMENT 4	– APPROVED ESTIMATION METHODOLOGY.....	67
ATTACHMENT 5	– APPROVED SUBSTITUTION METHODOLOGY.....	70
ATTACHMENT 6	– NET SYSTEM PROFILE METHODOLOGY.....	74

CHAPTER 1 – GENERAL

1.1 General

1.1.1 Definitions

The following words and phrases in these *Procedures* which appear in italics have the meaning given them in Part 19 of the Rules unless an intention to the contrary appears:

declared transmission system service provider

gas day

Market information bulletin board

Market Participant

metering database

metering installation

metering register

publish

settlement

suspension notice

transmission delivery point

Other words and phrases in these *Procedures* which appear in italics have the following meanings unless an intention to the contrary appears:

actual meter reading means figures or other information shown on a *metering register* or instrument either read or collected directly or transmitted or transformed by electronic, radio, microwave, sonic or other means.

address based identifiers, in relation to the address standard specified in the *Gas Interface Protocol*, the attributes that make up the *address based identifiers* are street type, street suffix, flat or unit type, floor or level type and postal delivery type.

aged debt in relation to a person at any time, means an amount or amounts owed by that person to a *Market Participant* for the sale of gas by the *Market Participant* to that person where, at that time, the amount or the aggregate of those amounts:

- (a) exceeds \$100; and
- (b) has been due and payable for more than 40 *business days*.

Albury gas distribution system has the meaning it is given in the definition of Distributor.

allowable period means either:

- (a) in relation to a *transfer request* lodged without a *customer no-change statement*, the period commencing on the 10th *business day* prior to the *proposed transfer date* and expiring on the fourth *business day* after the *proposed transfer date*; or
- (b) in relation to a *transfer request* lodged with a *customer no-change statement*, the period commencing on the fourth *business day* prior to the *proposed transfer date* and expiring on the fourth *business day* after the *proposed transfer date*.

alternative transfer date notice, In relation to a *transfer request*, a notice delivered to AEMO pursuant to clause 4.6.3(a).

applicable access arrangement, Has the meaning given in the *Law*

approved estimation methodology An applicable estimation methodology contained in Attachment 4.

approved substitution methodology An applicable substitution methodology contained in Attachment 5.

approved validation methodology An applicable validation methodology contained in Attachment 3.

average heating value, in relation to a *reading period*, has the meaning given to that term in clause 2.6.1(b).

base load, in relation to a *distribution supply point*, means the level of gas consumption at that *supply point* that is not affected by the weather.

basic meter means a *meter* without a *data logger*.

base reading, see clause 2.6.1(a).

business day means a day other than a Saturday, Sunday or a day which has been proclaimed to be a public holiday in the Melbourne metropolitan area.

checksum, in relation to a *MIRN*, means a single digit used to validate the correct entry of a *MIRN* in a database entry field.

commission means in relation to a *supply point*, means that the *supply point* has the ability to flow *gas* to the *Customer*.

complete customer listing means a listing created and administered by a *non-declared host Retailer* that comprises a number of data attributes as defined in the *Gas Interface Protocol* of every *MIRN* that is recorded in the *non-declared host Retailer* Customer Information System (CIS) for which they are the current *FRO*.

complete MIRN listing means a listing created and administered by a *Distributor* that comprises the *MIRN*, *discovery address*, *meter number* of every *MIRN* that is recorded in the *MIRN database* of that *Distributor*.

consumed energy, in relation to a period, the *flow* during that period converted to energy by application of the *average heating value* and the applicable pressure correction factor (see clause 2.6.1(a)(iv)).

Note: In the case of a *meter* calibrated in imperial units, the *flow* is converted by the *Distributor* into metric units.

Consumed Energy Scenarios (Victoria) means a process *published* by AEMO that defines the manner in which *consumed energy* must be delivered to AEMO.

custody transfer meter means a *meter* that measures the transfer of gas between the *transmission system* and a distribution pipeline.

Customer means a person who consumes gas at a *supply point*.

customer characterisation, in relation to a *Customer*, means whether the *Customer* is:

- (a) metropolitan or non-metropolitan (where “metropolitan” refers to the Melbourne metropolitan area), as published by the Department of Transport, Planning and Local Infrastructure (or its successor); and
- (b) residential or business, where residential means the primary use of the *consumed energy* is for household purposes and business means the primary use of the *consumed energy* is for commercial type purposes as determined by the retail business for customer billing.

customer no-change statement, see clause 4.1.1(a)(ii)(iii).

customer-own read means a *read* undertaken by a *customer* of a *Retailer* details of which are provided by the *customer* by telephone or in writing to the *Retailer* or in writing to the *Distributor* for the *distribution area* in which the *distribution supply point* to which the *meter* relates is located.

data collection system means all equipment and arrangements that lie between the *metering database* and the point where the data collected by equipment and installations associated with a *meter* enters the public telecommunications network.

data logger means a device that collects and stores data relating to the volume, temperature and pressure of gas and is capable of either:

- (a) transferring recorded data to a portable reading device; or
- (b) being accessed electronically by AEMO through the data collection system.

data provision period, where the *proposed transfer date* nominated in a *transfer request* is a *prospective transfer date*, means the period commencing on the first *business day* of the *allowable period* and expiring at midnight on the first *business day* after the *business day* on which the *allowable period* expires.

data retention period, in relation to a *meter* at a particular time, means the period of seven years preceding that time.

declared host Retailer means in respect of a declared distribution system, the declared host Retailer designated under the legislation.

decommission, in relation to a *distribution supply point*, means to take action to preclude gas being supplied at that *distribution supply point* (eg. by plugging or removing the *meter* relating to that *distribution supply point*).

deregister, in relation to a *distribution supply point*, means to terminate the *MIRN* and remove it from the *MIRN database* of the *Distributor* in whose *distribution area* that *distribution supply point* is located (eg. following the dismantling of the *distribution supply point*).

discovery address, in relation to a *supply point*, means the address of the premises at a minimum including: street number (or the equivalent), street name, street identifier, suburb/city/town to which gas is supplied at that *supply point*. The *discovery address* may optionally also include other specified site address information that conforms with the address standard specified in the *Gas Interface Protocol*.

distribution area has the meaning given to it in the *Distributor's applicable access arrangement*.

Distribution Code means the Gas Distribution System Code made by the jurisdictional regulator for Victoria as amended from time to time.

distribution supply point means a point on a distribution pipeline at which gas is withdrawn from the distribution pipeline and delivered to a person who purchases that gas and consumes it at particular premises.

distribution tariff means a tariff or fee referred to in the *Distributor's applicable access arrangement*.

Distributor means the same as it means in Part 19 of the Rules and includes:

- (a) the service provider for a distribution pipeline in Victoria that does not form part of a declared distribution system;
- (b) the Albury Gas Co Limited (ACN 000 001 249) and any successor service provider for the distribution pipelines that serve Albury and its environs (the *Albury gas distribution system*),

but does not include the service provider for the distribution pipelines that serve Mildura and its environs.

effective degree day, see clause 3.1 of Attachment 6.

estimated meter reading means an estimate of an *actual meter reading* that is made under these *Procedures* in accordance with an *approved estimation methodology* or a *customer-own read*.

existing transfer request, see clause 4.1.5(c).

explicit informed consent means consent that satisfies the requirements for explicit informed consent set out in the Energy Retail Code published by the jurisdictional regulator for Victoria from time to time.

failed Retailer means a *Retailer* that has been issued with a *suspension notice* in accordance with Part 19 of the Rules.

flow means the difference between a *validated meter reading* and the immediately preceding *validated meter reading*.

FRC HUB means the information system provided by AEMO for the transmission of aseXML messages under these Procedures.

FRC HUB Operational Terms and Conditions means the terms and conditions under which AEMO, each *Market Participant*, *Retailer* and *Distributor* seek connection to and are obliged to operate under when connecting to and issuing or receiving transactions on the *FRC HUB*.

FRO means, in relation to a *supply point*, the person identified in the *metering register* as the Market Participant responsible, at the relevant time, for settling the account relating to that *supply point*.

Gas Interface Protocol means the protocol which governs the manner and form in which information is to be provided, notice given, notices or documents delivered and requests made as contemplated by these *Procedures*.

generated consumed energy means an estimate of consumption energy at a *Supply Point*, calculated by AEMO using the estimation methodology in Attachment 4, where the energy is required for wholesale settlement calculations and for which AEMO has not yet received a *validated meter reading* or *estimated meter reading* from the relevant *Distributors*.

heating value zone, in relation to a *supply point*, means the heating value zone (if any) which is determined by AEMO as the heating value zone for that *supply point*.

installation database, in relation to a *Distributor*, means the *database* which the *Distributor* is required to create, maintain and administer under clause 6 of the *Distribution Code*.

interval meter means a *meter* with a *data logger*.

Law, Means the National Gas Law as set out in the schedule to the *National Gas (South Australia) Act 2008* (SA).

meter means a device used to directly measure the mass or volume of gas passing through it and includes the associated equipment attached to the device to filter, control or regulate the flow of gas.

meter data database, see clause 2.1.1.

meter number, A unique identification number allocated to the *meter*.

meter reading means an *actual meter reading, estimated meter reading or substituted meter reading*. A reference to a *meter reading* in respect of a particular date or *reading period* is to the reading that has most recently been included in the *meter data database* in respect of that date or *reading period*.

meter reading schedule, see clause 2.2.1(b).

MIRN, in relation to a *supply point* at any time, means the meter installation registration number for that *supply point* as recorded at that time:

- (a) where the *supply point* is a *distribution supply point*, in the *MIRN* database of the *Distributor* in whose *distribution area* that *supply point* is located; and
- (b) where the *supply point* is a *transmission supply point*, in the *metering register*,

including the *checksum* for that *MIRN*.

MIRN database, see clause 3.1.

MIRN discovery request, in relation to a *distribution supply point*, means a request by a *Market Participant* or AEMO to a *Distributor* for the information referred to in clause 3.1.1 in relation to a *distribution supply point* which is (or is purported to be) located in the *distribution area* of that *Distributor* (such *distribution supply point* being identified by reference to a *MIRN* or a *discovery address*).

net system load profile methodology means the methodology contained in Attachment 6.

network section means the pipeline associated with a *Network ID*.

Network ID means the identifier assigned to a pipeline in accordance with the *Gas Interface Protocol*.

new basic meter means the installation of a *basic meter* to a *supply point* that has never had a meter installation registered previously.

non-declared host Retailer means a *Retailer* that is not a *declared host Retailer*.

NSL, see clause 1.1 of Attachment 6.

objection notice, see 4.3.1.

objection withdrawal notice, see clause 4.3.2.

permitted prospective period, in relation to a *transfer request*, means the period of 66 *business days* commencing on (and including) the day on which the *transfer request* is delivered to AEMO.

permitted retrospective period, in relation to a *transfer request*, means the period of 118 *business days* expiring immediately before the day on which the *transfer request* is delivered to AEMO.

pressure correction factor means the value applied to reflect the difference in volume of gas at the pressure at which its volume is measured, and the volume of that gas at standard metric conditions.

Procedures means these Retail Market Procedures (Victoria).

proposed transfer date, in relation to a *transfer request*, means the day nominated in that *transfer request* as the day with effect from which the *Market Participant* who delivers the *transfer request* to AEMO is to be registered in the *metering register* as the *FRO* for the *supply point* to which the *transfer request* relates.

prospective transfer date, in relation to a *transfer request*, means a *day* which is on or after the day on which the *transfer request* is delivered to AEMO.

read means the process of collecting figures or other information from a *meter* either directly or through being transmitted or transformed by electronic, radio, microwave, sonic or other means.

read failure notice, see clause 4.6.2.

reading period, The period between two consecutive *validated meter readings* for a *basic meter distribution supply point* (see clause 2.6.1(a)).

reference reading, The *validated meter reading* obtained on the end date of a *reading period* (see clause 2.6.1(a)).

registration end date, in relation to a *transfer request* which nominates a *retrospective transfer date* as the *proposed transfer date*, means the last date that the *Market Participant* who delivered the *transfer request* wishes to be registered in the *metering register* as the *FRO* for the *supply point* to which that *transfer request* relates.

registration notice, see clause 4.8.

replacement basic meter means installation of a *basic meter* to a *supply point* that replaces a *basic meter* currently registered as installed at that *supply point*.

Retailer means the same as it means in Part 19 of the Rules and includes:

- (a) a user of a distribution pipeline in Victoria that does not form part of a declared distribution system;
- (b) a user of the *Albury gas distribution system*,

but does not include a user of the distribution pipelines that serve Mildura and its environs.

retrospective transfer date, in relation to a *transfer request*, means a *day* which is before the day on which the *transfer request* is delivered to AEMO.

retrospectively affected FRO, in relation to a *transfer request* which nominates a *retrospective transfer date* as the *proposed transfer date*, means the person whose period of registration in the *metering register* as the *FRO* for the *supply point* to which the *transfer request* relates would be decreased or eliminated if the *Market Participant* who delivered the *transfer request* to AEMO were to be registered in the *metering register* as the *FRO* for that *supply point* with effect from the *retrospective transfer date*.

RoLR gas day means the *gas day* nominated by AEMO in a *suspension notice* issued to a *Retailer*.

scheduled read date, in respect of a *meter* relating to a *distribution supply point*, means a day specified in the applicable *meter reading schedule* as a day on which the *Distributor* is to read that *meter*.

second tier supply point means a *distribution supply point* in respect of which the *FRO* is a person other than the *declared host Retailer*. For the avoidance of doubt, in a distribution pipeline that is not part of a declared distribution system that operates under a global energy allocation regime this means all *supply points* are recognised as a *second tier supply point*.

service order means a request from a *Market Participant* requesting that the *Distributor* undertake the delivery of a service.

service order in flight report means a listing created and administered by a *Distributor* that comprises a number of data attributes as defined in the *Gas Interface Protocol* of every *MIRN* that the *failed Retailer* has initiated a *Service Order* and the *Distributor* has yet to complete the request.

site access information, in relation to a *meter*, means information and safety instructions that are relevant to locating and *reading* that *meter*.

special read means a *read* undertaken other than in accordance with a *meter reading schedule*.

special read date means the date nominated by a *Retailer* as the date on which a *Distributor* is to perform a *special read*.

street/suburb combination, in relation to a *MIRN discovery request*, means the *discovery address* excluding the street number or its equivalent.

special read request means a request for a *special read* in the form prescribed by the *Gas Interface Protocol*

subject customer, in relation to a *supply point*, means a person who purchases or proposes to purchase gas that is delivered at that *supply point* and who consumes or proposes to consume that gas at a particular premises.

substituted meter reading means a reading that is substituted under these *Procedures* for an *actual meter reading* in accordance with an *approved substitution methodology*.

supply point means a *transmission supply point* or a *distribution supply point*.

tariff zone has the meaning given to that term in the *Distributor's applicable access arrangement*.

temperature sensitivity factor, in relation to a *distribution supply point*, means the incremental gas consumption at that *supply point* that is the GJ per EDD calculated in accordance with Attachment 6.

transfer request, in relation to a *supply point*, means a request by a *Market Participant* to AEMO to register that *Market Participant* in the *metering register* as the *FRO* for that *supply point*.

transfer request notification, see clause 4.2.

transfer withdrawal notice, see clause 4.5.1.

transmission supply point means a point on the *transmission system* at which gas is withdrawn from the *transmission system* and delivered to a person who purchases that gas and consumes it at a particular premises.

transmission system means the system of transmission pipelines in Victoria and includes the declared transmission system.

transmission system service provider means a service provider in respect of the whole or any part of the *transmission system* and includes the *declared transmission system service provider*.

transmission zone means a zone as defined in the *applicable access arrangement* of a service provider in respect of the whole or any part of the *transmission system*.

validated meter reading means a *meter reading* that has been validated in accordance with an *approved validation methodology*.

1.1.2 Interpretation

(a) These *Procedures* must be interpreted according to the following principles of interpretation, unless an intention to the contrary appears:

- (i) time of day is to be calculated in the same way as it is for the purposes of Part 19 of the Rules;

Note: This means that Eastern Standard Time applies and no account is taken for the adoption of Summer Time in Victoria.

- (ii) if a period of time is specified in days from a given day or an act or event, it is to be calculated exclusive of that day or, if that day is not a

business day, exclusive of the first *business day* following that day;
and

- (iii) in deciding whether a person has used reasonable endeavours, regard must be had to all relevant factors including whether the person has acted in good faith and has done what is reasonably necessary in the circumstances.
- (b) AEMO publishes, on the *market information bulletin board*, a daily flow weighted heating value by 5pm on the *gas day* following the *gas day* to which the daily flow weighted heating value relates. The average of these values over a billing period is used by the *Distributors* in the conversion of volume values to energy. Index reads are deemed to have occurred at 6:00 am on each *gas day* and therefore bounds the energy consumed to the end of the previous *gas day*. Hence the average daily flow weighted heating value published by AEMO on the day of the index read, represents the final average daily flow weighted heating value in the set of average daily flow weighted heating values used by the *Distributor* in calculating the *average heating value* over the billing period.
- (c) Where Registered Participants are required to calculate values under these *Procedures*, such calculations must not apply truncation to any value. Derived values will not have an implied accuracy greater than any of the input variables to the calculation. Thus for a value derived from the product of two variables, one with two decimal place precision and one with three decimal place precision, the product will initially be set to three decimal places to allow for rounding to a final precision of two decimal places. Rounding will only be applied to the final value derived in the calculation process. The rounding method will be as described in the examples below:

ROUND 2.14 to one decimal place - equals 2.1
ROUND 2.15 to one decimal place - equals 2.2
ROUND 2.159 to one decimal place - equals 2.2
ROUND 2.149 to two decimal places - equals 2.15
ROUND -1.475 to two decimal places equals -1.48

Example 1 Energy Calculation:

PCF of 1.0989
HV of 39.81
Vol of 200
 $1.0989 * 39.81 * 200 = 8749.4418$
Rounded to 8749

Example 2 Energy Calculation:

PCF of 1.0989
HV of 41.89
Vol of 200

1.0989 * 41.89* 200= 9206.5842
Rounded to 9207

Example 3 Energy Calculation:

PCF of 1.0989

HV of 38.55

Vol 345 cubic feet (100s)

$345 * 2.832 * 1.0989 * 38.55 = 41389.94982$

Rounded to 41390

1.2 Gas Interface Protocol

1.2.1 [Deleted]

1.2.2 Amendment

- (a) Except otherwise specified in clause 1.2.2(b), the *Gas Interface Protocol* may only be amended by AEMO undertaking one of the following consultative procedures:
- (i) the ordinary process for making *Procedures* under rule 135EE of the Rules; or
 - (ii) the expedited process for making *Procedures* under rule 135EF of the Rules.
- (b) If a *Retailer* or a *Distributor* or AEMO becomes aware of an addition to the aseXML schema enumerated *address based identifiers*, as soon as practicable after becoming aware of the change the relevant *Retailer* or *Distributor* or AEMO must:
- (i) ensure that this new *address based identifier* is added to the aseXML schema enumerated *address based identifiers* using the rapid change process as set out in the ASWG Change Management Process as published on the AEMO website; and
 - (ii) where there has been an update to the aseXML schema enumerated *address based identifiers*, provide a notice via the *FRC HUB* broadcast email distribution list that an addition to the list has been implemented; and
 - (iii) where a *Retailer* or a *Distributor* or AEMO has received a notice as set out in clause 1.2.2(b)(ii), AEMO, all *Retailers* and all *Distributors* must use reasonable endeavours to implement the updated enumerations file within 10 *business days* but no later than 35 *business days* after the date of the notice.

1.2.3 Publication

AEMO must *publish* the *Gas Interface Protocol*, as amended from time to time.

1.2.4 Effect

AEMO and each *Market Participant*, *Distributor* and *transmission system Service Provider* must comply with, and is bound by, the *Gas Interface Protocol* in respect of the provision of information, giving of notice, delivery of notices or documents and making of requests, and the receipt of information, notice, notices, documents or requests, as contemplated by these *Procedures*.

1.2.5 FRC HUB

- (a) In accordance with the certification process (Gas FRC Business to Business Connectivity Testing and System Certification) maintained and *published* by AEMO, AEMO and each *Retailer* and *Distributor* must be certified by AEMO prior to using the *FRC HUB* for transactions specified in the *Gas Interface Protocol*.
- (b) AEMO must maintain and *publish FRC HUB Operational Terms and Conditions* for the *FRC HUB*.
- (c) AEMO, prior to implementing changes to the *published FRC HUB Operational Terms and Conditions* for the *FRC HUB*, must:
 - (i) provide ~~Market—Participants~~Retailers and *Distributors* with the proposed change to the *FRC HUB Operational Terms and Conditions*;
 - (ii) allow a reasonable time to receive Retailer ~~Market Participant~~ and *Distributor* responses to the proposed *FRC HUB Operational Terms and Conditions*.
- (d) AEMO and each Retailer~~Market Participant~~ and *Distributor* must comply with the *FRC HUB Operational Terms and Conditions*, as amended and *published* by AEMO from time to time.
- (e) A breach, by a *Retailer* or *Distributor* of the *FRC HUB Operational Terms and Conditions*, is taken to be a breach of these *Procedures* for the purposes of section 91MB of the Law.
- (f) Where a *Retailer* or *Distributor* uses the *FRC HUB* in breach of the *FRC HUB Operational Terms and Conditions*, then as soon as AEMO becomes aware of such breaches AEMO:
 - (iii) must notify the *Retailer* or *Distributor* of the breach; and
 - (iv) may take any action in relation to the breach, including issuing a direction to the *Retailer* or *Distributor* under section 91MB(4)(2) of the Law to rectify the breach or to take specified measures to ensure future compliance (or both).
- (g) Where a *Retailer* or *Distributor* continues to use the *FRC HUB* in breach of the *FRC HUB Operational Terms and Conditions* after a notice of a breach under 1.2.5(f)(i) has been provided to the *Retailer* or *Distributor*, and continued

significant breaches of the same nature are evident, then AEMO may treat the continued breach as a material breach of these *Procedures* and refer the matter to the AER in accordance with section 91MB(4)(c) of the Law.

1.2.5A Additional FRC HUB outages

- (a) After consultation with affected *Distributors* and *Retailers*, AEMO may determine an outage period during which the *FRC HUB* will not be available, in addition to the outages covered by the *FRC HUB Operational Terms and Conditions* and unplanned outages (an “additional *FRC HUB* outage”).
- (b) AEMO must publish details of the additional *FRC HUB* outage at least 7 days before the outage commences.
- (c) The published details of the additional *FRC HUB* outage must include any changes to any timing requirement set out in these *Procedures* that will apply during the outage.

1.2.6 [Deleted]

1.3 [Deleted]

1.3A [Deleted]

1.4 Confidentiality

Note: See Division 7, Part 6 of the Law and rule 138A of the Rules which provides for the use and disclosure of confidential information.

Unless these *Procedures* state otherwise, any information provided to AEMO, a *Retailer*, or a *Distributor* under these *Procedures* is classified as confidential information for the purposes of the Law and the Rules.

1.4.1 [Deleted]

1.4.2 [Deleted]

1.4.3 [Deleted]

1.4.4 [Deleted]

1.4.5 [Deleted]

1.4.6 [Deleted]

1.5 [Deleted]

1.6 [Deleted]

1.7 Market Audit

- (a) AEMO must undertake a review in accordance with this clause (“**Review**”) at least every two years.

(a1) A Review must constitute an examination in accordance with the standard for a review specified in Auditing Standard ASAE 3000 (Explanatory Framework for Standards on Audit and Audit Related Services) (as varied from time to time) prepared by the Auditing and Assurance Standards Board.
- (b) In undertaking a *Review*, AEMO must appoint a person (a “**Market Auditor**”) who in AEMO’s reasonable opinion is independent and suitably qualified to conduct a *Review*.
- (c) A *Review* must examine compliance by AEMO with its processes and the effectiveness and appropriateness of systems utilised in the operation of any activities as set out in or contemplated by the *Procedures*, including but not limited to:
 - (i) AEMO's compliance processes and compliance with the *Procedures*;
 - (ii) IT Controls, including software management and business continuity;
 - (iii) integrity of the AEMO meter register;
 - (iv) profiling and allocation processes and systems; and
 - (v) retail billing and information systems.
- (d) AEMO will determine, in consultation with *Market Participants* and *Distributors*, the extent and scope of the *Review* to be undertaken.
- (e) AEMO must ensure that the person who conducts the *Review* prepares a report in which the results of the *Review* are set out.
- (f) AEMO must *publish* the report on its website and make it available to *Participants* on request

CHAPTER 2 – TRADING PROCESSES

2.1 Meter Data Database

2.1.1 Creation, Maintenance and Administration

- (a) Each *Distributor* must create, maintain and administer a database in relation to all of the *distribution supply points* that are located in the *distribution area* of that *Distributor*, such database to include the following information in respect of each such *distribution supply point* and the *meter* that relates to that *distribution supply point*:
- (i) the *MIRN*;
 - (ii) the *meter number*;
 - (iii) each *actual meter reading* made during the *data retention period*, and the date on which that *reading* was undertaken;
 - (iv) each *estimated meter reading* made during the *data retention period*, the date to which that *estimated meter reading* pertains and details of the *approved estimation methodology* applied to obtain that *estimated meter reading* (each *estimated meter reading* must be identified as such and, where an *estimated meter reading* is a *customer-own read*, the *estimated meter reading* must also be identified as a *customer-own read*);
 - (v) each *substituted meter reading* made during the *data retention period*, the date to which that *substituted meter reading* pertains and details of the *approved substitution methodology* applied to obtain that *substituted meter reading* (each *substituted meter reading* must be identified as such); and
 - (vi) in respect of each *meter reading* included in the *meter data database*:
 - (A) the *flow* during the period since the immediately preceding *validated meter reading* which is included in the *meter data database*;
 - (B) the *average heating value* for that period as calculated in accordance with these *Procedures*;
 - (C) the *pressure correction factor* to be applied in respect of that *flow*; and
 - (D) the *consumed energy* during that period.
- (b) The obligations set out in clauses 2.1.1(a)(iii), (iv), (v) and (vi) relate to *validated meter readings*. A *Distributor* may, but is not required to, include in the *meter data database meter readings* that are not *validated meter readings* (each non-*validated meter reading* must be identified as such).

2.1.2 [Deleted]

2.1.3 Updating of Meter Data Database

Except as otherwise provided in clause 2.9 in relation to the period within which such information must be included in the *meter data database*, each *Distributor* must use its reasonable endeavours to ensure that the information required to be included in its *meter data database* is included in that *meter data database* by 5.00 pm on the first *business day* following the day on which that information is obtained or calculated by the *Distributor*.

2.1.4 Use of Data

AEMO must use the information provided to AEMO from the *meter data database* of each *Distributor* for *settlement* purposes or as otherwise agreed with the responsible *Distributor* in respect of a distribution pipeline that is not part of a declared distribution system.

2.1.5 Provision of Meter Reading Information

- (a) Except as otherwise provided in clause 2.9 in relation to the period within which such information must be provided, a *Distributor* must provide to the *FRO* for a *distribution supply point* that is located in the *distribution area* of the *Distributor* the following information in respect of the *meter* relating to the *distribution supply point* (identified by reference to the *MIRN* for that *distribution supply point*):
- (i) where the *Distributor* has read the *meter* in accordance with the applicable *meter reading schedule* and the *actual meter reading* is a *validated meter reading*, the *Distributor* must use its reasonable endeavours to provide the *FRO* with the following information:
 - (A) the day on which the *meter* was read; and
 - (B) the *validated meter reading* for that *meter*,by 5.00 pm on the first *business day* following the day on which the *meter* was read;
 - (ii) where the *Distributor* has read the *meter* in accordance with the applicable *meter reading schedule* but the *actual meter reading* is not a *validated meter reading*, the *Distributor* must:
 - (A) undertake an *estimated meter reading* as at the *scheduled read date* in accordance with clause 2.4; and
 - (B) use its reasonable endeavours to provide the *FRO* with the following information:
 - (1) the *scheduled read date*;
 - (2) the *estimated meter reading* (identified as such) for that *meter*;

- (3) the details of the *approved estimation methodology* applied to obtain that *estimated meter reading*; and
 - (4) the reason for the *actual meter reading* not being a *validated meter reading*,

by 5.00 pm on the second *business day* following the day on which the *meter was read*;
- (iii) where the *Distributor* has been unable to *read the meter* in accordance with the applicable *meter reading schedule*, the *Distributor* must:
 - (A) undertake an *estimated meter reading* as at the *scheduled read date* in accordance with clause 2.4; and
 - (B) use its reasonable endeavours to provide the *FRO* with the following information:
 - (1) the *scheduled read date*;
 - (2) the *estimated meter reading* (identified as such) for that *meter*;
 - (3) the details of the *approved estimation methodology* applied to obtain that *estimated meter reading*; and
 - (4) the reason for the *Distributor* not being able to *read the meter*,

by 5.00 pm on the second *business day* following the *scheduled read date* for that *meter*;
- (iiia) where the *Distributor* has been unable to obtain a *validated meter reading* in accordance with the applicable *meter reading schedule*, the *Distributor* must use its reasonable endeavours to provide the *FRO* with the following information;
 - (A) the day on which the *meter was read*; and
 - (B) the *validated meter reading* for that *meter*,

by 5.00 pm on the second *business day* following the day on which the *meter was read*;
- (iiib) where the *Distributor* has been provided a *customer own read* by the *FRO* and the *Distributor* reasonably considers the *customer own read* to be accurate, the *Distributor* must use its reasonable endeavours to provide the *FRO* with the following information;
 - (A) the day on which the *meter was read*; and
 - (B) the *validated meter reading* for that *meter*,

by 5.00 pm on the first *business day* following the day on which the *customer own read* was received by the *Distributor*,

- (iv) where the *Distributor* has undertaken a *special read* of the *meter* that was requested by the *Retailer* who is the *FRO* for the *distribution supply point* to which that *meter* relates, and the *actual meter reading* is a *validated meter reading*, the *Distributor* must use its reasonable endeavours to provide the *Retailer* with the following information:

- (A) the day on which the *meter* was read; and
- (B) the *validated meter reading* for that *meter*,

by 5.00 pm on the first *business day* following the day on which the *meter* was read;

- (v) where:

- (A) the *Distributor* has undertaken a *special read* of the *meter*, but the *actual meter reading* is not a *validated meter reading*; or
- (B) the *Distributor* has been unable to read the *meter* on a *special read date*,

the *Distributor* must use its reasonable endeavours to notify the *Retailer* who requested the *special read* of that fact (and the reason for it), and to specify the next day on which a *special read* of that *meter* can be undertaken by the *Distributor*, by 5.00 pm on the first *business day* following the *special read date*;

For the avoidance of doubt, nothing in clause 2.1.5(a)(v) shall be construed as requiring the *Distributor* to attempt to read the *meter* on the day specified by it unless the relevant *Retailer* subsequently nominates that day for that purpose in a *special read request* made pursuant to clause 2.2.4 in which case clause 2.4.3 will apply.

- (vi) where details of a *customer-own read* are provided by the *customer* in writing to the *Distributor*, the *Distributor* must use its reasonable endeavours to provide those details to the *FRO* by 5.00 pm on the first *business day* following the day on which the *Distributor* received those details and must identify the details as relating to a *customer-own read*; and

- (vii) where the *Distributor* has substituted a *meter reading* in accordance with clause 2.5, the *Distributor* must use its reasonable endeavours to provide the *FRO* with the following information:

- (A) the date to which the *substituted meter reading* pertains;
- (B) the *substituted meter reading* (identified as such) for that *meter*; and

(C) details of the *approved substitution methodology* applied to obtain that *substituted meter reading*,

by 5.00 pm on the first *business day* following the day on which the *substituted meter reading* was calculated.

(b) Where, pursuant to clause 4.2 or 4.6, AEMO has notified a *Distributor* of a *transfer request* or an *alternative transfer date notice*, the *Distributor* must provide to AEMO the following information in respect of the *meter* relating to the *distribution supply point* to which the relevant *transfer request* relates (identified by reference to the *MIRN* for that *distribution supply point*):

(i) where the *Distributor* has read the *meter* during the *allowable period* (if any) in relation to the relevant *proposed transfer date*, or the *permitted prospective period* (if any) in relation to the relevant *transfer request*, and the *meter reading* is a *validated meter reading* and an *actual meter reading*, the *Distributor* must use its reasonable endeavours to provide to AEMO the following information:

(A) the dates of that *validated meter reading* and the immediately preceding *validated meter reading*; and

(B) the *consumed energy* for the period between the dates referred to in clause 2.1.5(b)(i)(A),

by midnight on the first *business day* following the day on which the *meter* was read; and

(ia) where the *Distributor* has read the *meter* during the *allowable period* (if any) in relation to the relevant *proposed transfer date*, or the *permitted prospective period* (if any) in relation to the relevant *transfer request*, and the *meter reading* is a *validated meter reading* and an *actual meter reading* but the *Distributor* has been unable to obtain the reading in accordance with the *meter reading schedule*, the *Distributor* must use its reasonable endeavours to provide to AEMO the following information:

(A) the dates of that *validated meter reading* and the immediately preceding *validated meter reading*; and

(B) the *consumed energy* for the period between the dates referred to in clause 2.1.5(b)(ia)(A),

by midnight on the second *business day* following the day on which the *meter* was read;

(ib) where the *Distributor* has read the *meter* during the *allowable period* (if any) in relation to the relevant *proposed transfer date*, or the *permitted prospective period* (if any) in relation to the relevant *transfer request*, and the *meter reading* is a *validated meter reading* and a *substituted meter*

reading, the *Distributor* must use its reasonable endeavours to provide to AEMO the following information:

- (A) the dates of that *validated meter reading* and the immediately preceding *validated meter reading*; and
- (B) the *consumed energy* for the period between the dates referred to in clause 2.1.5(b)(ib)(A),

by midnight on the second *business day* following the day on which the *meter was read*

- (ii) where the *Distributor* has *read* the *meter* on the *retrospective transfer date* (if any) nominated in the relevant *transfer request* and the *meter reading* is a *validated meter reading* (other than an *estimated meter reading*), the *Distributor* must use its reasonable endeavours to provide to AEMO:

- (A) the dates of that *validated meter reading* and the immediately preceding *validated meter reading*; and
- (B) the *consumed energy* for the period between the dates referred to in clause 2.1.5(b)(ii)(A),

by midnight on the first *business day* following the day on which the *transfer request notification* relating to the *transfer request* was delivered to it.

- (c) Where, pursuant to clause 4.8, AEMO delivers a *registration notice* in respect of a *distribution supply point* to the *Distributor* in whose *distribution area* that *distribution supply point* is located, that *Distributor* must use its reasonable endeavours to:

- (i) provide to the *Market Participant* that has been registered as the *FRO* for the *distribution supply point* the *validated meter reading* referred to in clause 2.1.5(b)(i), 2.1.5(b)(ia), 2.1.5(b)(ib) or 2.1.5(b)(ii) (whether that reading was obtained from a *special read* of the *meter* or as a result of a read conducted in accordance with a *meter reading schedule*); and
- (ii) where the *proposed transfer date* nominated in the *transfer request* is a *prospective transfer date*, provide to the person who was the *FRO* for that *distribution supply point* immediately prior to the registration of the new *FRO* for that *distribution supply point* the *validated meter reading* referred to in clause 2.1.5(b)(i), 2.1.5(b)(ia) or 2.1.5(b)(ib) (where that reading was obtained from a *special read* of the *meter*),

by 5.00 pm on the first *business day* following the day on which the *Distributor* receives the *registration notice*.

- (d) Subject to clause 2.1.5(e), a *Distributor* must use its reasonable endeavours to provide to the *FRO* for a *distribution supply point* that is located in the

distribution area of the *Distributor* such information from its *meter data database* in respect of that *distribution supply point* and the *meter* relating to that *distribution supply point* (being information referred to in clause 2.1.1(a) other than information in relation to any *special read* requested by a person other than the *FRO* for that *distribution supply point*) as the *FRO* requests as follows:

- (i) if the request pertains to a time that is not more than two years prior to the day on which the request is delivered to the *Distributor*, by 5.00 pm on the fifth *business day* following the day on which the request is delivered to the *Distributor*;
 - (ii) if the request pertains to a time that is between two and seven years prior to the day on which the request is delivered to the *Distributor*, by 5.00 pm on the 10th *business day* following the day on which the request is delivered to the *Distributor*; and
 - (iii) in either case, that information must be identified to the *FRO* by reference to the *MIRN* for the relevant *distribution supply point*.
- (e) The *FRO* for a *distribution supply point* may only request information from a *Distributor* pursuant to clause 2.1.5(d) that relates to a period during which that *FRO* was registered as the *FRO* for that *distribution supply point* in the *metering register*.
- (f) A *Distributor* must use its reasonable endeavours to provide to AEMO such information from its *meter data database* in respect of a *distribution supply point* and the *meter* relating to that *distribution supply point* (being information referred to in clause 2.1.1(a)) as AEMO requests as follows:
- (i) if the request pertains to a time that is not more than two years prior to the day on which the request is delivered to the *Distributor*, by 5.00 pm on the fifth *business day* following the day on which the request is delivered to the *Distributor*;
 - (ii) if the request pertains to a time that is between two and seven years prior to the day on which the request is delivered to the *Distributor*, by 5.00 pm on the 10th *business day* following the day on which the request is delivered to the *Distributor*; and
 - (iii) in either case, that information must be identified to AEMO by reference to the *MIRN* for the relevant *distribution supply point*.

2.2 Meter Reading

2.2.1 Meter Reading Schedule

- (a) [Deleted]
- (b) Each *Distributor* must provide to each *Retailer* who is the *FRO* for a *distribution supply point* a schedule (*meter reading schedule*) setting out the date on which it proposes to *read* all its *meters* during each 12 month period commencing on either 1 January or 1 July. The *meter reading schedule* must provide for all such *meters* to be read at intervals of approximately one month (where the *meters* are on a monthly reading cycle) or two months (where the *meters* are on a bimonthly reading cycle), with the first reading to be undertaken approximately one month or two months (as the case may be) after the last reading undertaken prior to the commencement of the *meter reading schedule*.
- (c) A *meter reading schedule* must be provided under clause 2.2.1(b) in each year, not less than two months prior to the expiry of the then current *meter reading schedule*.
- (d) A *Retailer* may at any time request a *Distributor* to change a date in a *meter reading schedule* where that change pertains to a *meter* that relates to a *distribution supply point* which is located in the *distribution area* of that *Distributor* and in respect of which the *Retailer* is the *FRO*. However, the *Distributor* is not required to make the requested change.
- (e) A *Distributor* must notify the *Retailer* who is the *FRO* for a *distribution supply point* in the *distribution area* of that *Distributor* of any changes the *Distributor* proposes to make to a date in a *meter reading schedule*, in respect of the reading of the *meter* relating to that *distribution supply point*, as far as practicable at least two months prior to that change being made and the *Distributor* must consult with that *Retailer* prior to making that change.
- (f) A *Distributor* must use its reasonable endeavours to *read meters* in accordance with the applicable *meter reading schedule* or as otherwise agreed with the *Retailer* who is the *FRO* for the *distribution supply points* to which the relevant *meters* relate.
- (g) If, in respect of a particular day, a *Distributor* is unable to *read the meters* comprising a discrete route in accordance with a *meter reading schedule*, the *Distributor* must use its reasonable endeavours to notify that failure to each *Retailer* who is a *FRO* for a *distribution supply point* to which such a *meter* relates by 5.00 pm on the second *business day*.

2.2.2 Site Access Information

- (a) [Deleted]
- (b) Each *Retailer* who is the *FRO* for a *distribution supply point* which is located in the *distribution area* of a *Distributor* must use its reasonable endeavours to provide that *Distributor* with details of any changes to any *site access information* in relation to the *meter* that relates to that *distribution supply point* by 5.00 pm on the first *business day* following the day on which the *Retailer* receives those details. Those details must be identified to the *Distributor* by reference to the *MIRN* for the *distribution supply point* to which the *meter* relates.
- (c) Each *Distributor* must use its reasonable endeavours to provide each *Retailer* who is the *FRO* for a *distribution supply point* which is located in the *distribution area* of a *Distributor* with details of any changes to any *site access information* in relation to the *meter* that relates to that *distribution supply point* by 5.00 pm on the first *business day* following the day on which the *Distributor* receives those details. Those details must be identified to the *Retailer* by reference to the *MIRN* for the *distribution supply point* to which the *meter* relates.

2.2.3 Customer provided Meter Readings

If, following the failure by a *Distributor* to read a *meter*, the *customer* of a *Retailer* provides the *Retailer* with details of a *customer-own read*, the *Retailer* must use its reasonable endeavours to provide those details to the *Distributor* by 5.00 pm on the first *business day* following the day on which it receives those details from the *customer*.

2.2.4 Special Reads

- (a) A *Retailer* may request a *Distributor* to undertake a *special read* of a *meter* relating to a *distribution supply point* which is located in the *distribution area* of the *Distributor* by delivering a *special read request* to the *Distributor*. The *special read* request must nominate, as the day on which the *special read* is to be undertaken, a *business day* that is not less than two *business days* after the day on which the *special read request* is given to the *Distributor*.
- (b) The *Distributor* must use its reasonable endeavours to undertake the *special read* on the *special read date*.

2.2.5 [Deleted]

2.3 Validation of Meter Readings

2.3.1 Approved Validation Methodology

- (a) A *Distributor* must validate a *meter reading* for the purposes of these Procedures and must validate this meter reading in accordance with an approved validation methodology.

- (b) Prior to requesting the approval by AEMO of a validation methodology as an *approved validation methodology*, the *Distributor* must consult with each *Retailer* who is the *FRO* for a *distribution supply point* which is located in the *distribution area* of that *Distributor*.

2.3.2 Validation of Meter Readings

A *Distributor* must ensure that *meter readings* are validated in accordance with an *approved validation methodology* before the *meter reading*, or information calculated on the basis of the *meter reading*, is provided to a *FRO* or AEMO.

2.4 Estimated Meter Readings

2.4.1 Approved Estimation Methodology

- (a) If a *Distributor* is required to undertake an *estimated meter reading* for the purposes of these *Procedures*, the *Distributor* must undertake that *estimated meter reading* in accordance with an *approved estimation methodology*.
- (b) Prior to requesting the approval by AEMO of an estimation methodology as an *approved estimation methodology*, the *Distributor* must consult with each *Retailer* who is the *FRO* for a *distribution supply point* which is located in the *distribution area* of that *Distributor*.

2.4.2 Changes to Estimates

- (a) The *Retailer* who is the *FRO* for a *distribution supply point* to which a *meter* relates may, at any time, request a *Distributor* who has undertaken an *estimated meter reading* in relation to that *meter* for the purposes of these *Procedures* to change that estimate. The *Distributor* may change that estimate if it reasonably considers the revised estimate to be more accurate.
- (b) If a *Distributor* changes an *estimated meter reading*, then the *Distributor* must use its reasonable endeavours:
 - (i) to recalculate any *flow* and *consumed energy* calculated using the previous *estimated meter reading*;
 - (ii) to include the new *estimated meter reading*, *flow* and *consumed energy* in its *meter data database*;
 - (iii) to provide the new *estimated meter reading*, *flow* and *consumed energy* to the *FRO* for the *distribution supply point* by 5.00 pm on the first *business day* following the day on which that *estimated meter reading* is changed; and
 - (iv) to provide the new *consumed energy* to AEMO in relation to each *distribution supply point* which is a *second tier supply point* by midnight on the first *business day* following the day on which that *estimated meter reading* is changed.

2.4.3 Subsequent Actual Meter Reading

If a *Distributor* subsequently reads a meter in relation to which it has undertaken an *estimated meter reading* and the *actual meter reading* is a *validated meter reading* the *Distributor* must use its reasonable endeavours:

- (a) to recalculate any *flow* and *consumed energy* calculated using the previous *estimated meter reading*;
- (b) to include the *actual meter reading* and the new *flow* and *consumed energy* in its *meter data database*;
- (c) to provide the *actual meter reading* and the new *flow* and *consumed energy* to the *FRO* for the *distribution supply point* by 5.00 pm on the first *business day* following the day on which the *meter* was read; and
- (d) to provide the new *consumed energy* to AEMO in relation to each *distribution supply point* which is a *second tier supply point* by midnight on the first *business day* following the day on which the *meter* was read.

2.5 Substituted Meter Readings

2.5.1 Approved Substitution Methodology

- (a) A *Distributor* must only undertake a *substituted meter reading* in accordance with, and in the circumstances specified in, an *approved substitution methodology*. The *approved substitution methodology* must specify the criteria which must be satisfied before that methodology may be applied.
- (b) Prior to requesting the approval by AEMO of a substitution methodology as an *approved substitution methodology*, the *Distributor* must consult with each *Retailer* who is the *FRO* for a *distribution supply point* which is located in the *distribution area* of that *Distributor*.

2.5.2 Changes to substitutes

- (a) The *Retailer* who is the *FRO* for a *distribution supply point* to which a *meter* relates may, at any time, request a *Distributor* who has undertaken a *substituted meter reading* in relation to that *meter* for the purposes of these *Procedures* to change that substitute. The *Distributor* may change that substitute if it reasonably considers the revised substitute to be more accurate.
- (b) If a *Distributor* changes a *substituted meter reading*, then the *Distributor* must use its reasonable endeavours:
 - (i) to recalculate any *flow* and *consumed energy* calculated using a previous *substituted meter reading*;

- (ii) to include the new *substituted meter reading, flow and consumed energy* in its *meter data database*;
- (iii) to provide the new *substituted meter reading, flow and consumed energy* to the *FRO* for the *distribution supply point* by 5.00 pm on the first *business day* following the day on which that *substituted meter reading* is changed; and
- (iv) to provide the new *consumed energy* to AEMO in relation to each *distribution supply point* which is a *second tier supply point* by midnight on the first *business day* following the day on which that *substituted meter reading* is changed.

2.6 Calculation and Provision of Energy Data

2.6.1 Calculation of Energy Data

- (a) Where a *Distributor* has obtained or made a *validated meter reading* (the *reference reading*), the *Distributor* must calculate the *consumed energy* in relation to that *meter* during the period (the *reading period*) commencing on the date of the immediately preceding *validated meter reading* which is included in its *meter data database* in respect of that *meter* (the *base reading*) and expiring on the date of the *reference reading* as follows:
 - (i) the *Distributor* must calculate the *flow* during that *reading period* on the basis of the *reference reading* and the *base reading*;
 - (ii) where the *meter* is calibrated in imperial units the *Distributor* must convert the *flow* to metric units;
 - (iii) the *Distributor* must apply the applicable *pressure correction factor* to that *flow*; and
 - (iv) the *Distributor* must apply the *average heating value* for the *reading period* to the pressure corrected *flow* so as to obtain the energy deemed to be consumed (*consumed energy*) in relation to that *meter* during that *reading period*.
- (b) The *average heating value* for a *reading period* is to be calculated by the *Distributor* as the average, over the *reading period*, of the average daily flow weighted heating values *published* by AEMO on the *market information bulletin board*. Where the average daily flow weighted heating value for a day is not available, the *Distributor* must use the average daily flow weighted heating value for the previous day.
- (c) The *consumed energy* at *meters* and *metering installations* shall be calculated according to the energy calculation procedures made by AEMO pursuant to Part 19 of the Rules.

2.6.2 Provision of Energy Data

- (a) Except as otherwise provided in clause 2.9 in relation to the period within which such information must be provided, a *Distributor* must use its reasonable endeavours to provide to the *FRO* for the *distribution supply point* to which a *meter* relates (unless the *reference reading* was obtained from a *special read* of the *meter* requested by a person other than the *FRO* for that *distribution supply point*):
- (i) the *MIRN* for the *distribution supply point*;
 - (ii) the *meter number* for the *meter*;
 - (iii) the *flow* used to calculate the *consumed energy*, together with:
 - (A) the *reference reading* and the *base reading* used to calculate the *flow* (identified as being *actual meter readings*, *estimated meter readings* or *substituted meter readings* as the case may be); and
 - (B) the dates on which those *meter readings* were obtained or made;
 - (iv) the *pressure correction factor* and the *average heating value* used to calculate the *consumed energy*; and
 - (v) the *consumed energy*,
- by
- (1) 5.00pm on the first *business day* after the day on which the *meter* was *read* where the *meter reading* was a *validated meter reading*;
 - or
 - (2) by 5:00 pm on the first *business day* after the day on which a *meter read* was provided by the *FRO* where the *meter reading* was a *validated meter reading*, or
 - (3) where the *Distributor* has been unable to obtain a *validated meter reading* in accordance with a *meter reading schedule*, by 5:00 pm on the second *business day* after the *scheduled read date*; or
 - (4) where the *meter reading* was an *estimated meter reading* or a *substituted meter reading* by 5:00pm on the second *business day* after the *scheduled read date*.
- (b) Except as otherwise provided in clause 2.9 in relation to the period within which such information must be provided, a *Distributor* must also use its reasonable endeavours to provide to AEMO in relation to each *distribution supply point* which is a *second tier supply point*:
- (i) the *MIRN* for the *distribution supply point*;
 - (ii) the *consumed energy*;

- (iii) the dates on which the *reference reading* and *base reading* for the *consumed energy* were obtained or made; and
- (iv) information as to whether the readings used to calculate the *flow* are *actual meter readings*, *estimated meter readings* or *substituted meter readings*,
by
 - (1) midnight on the first *business day* after the day on which the *meter* was read where the *meter reading* was a *validated meter reading*; or
 - (2) by midnight on the first *business day* after the day on which a *meter read* was provided by the *FRO* where the *meter reading* was a *validated meter reading*, or
 - (3) where the *Distributor* has been unable to obtain a *validated meter reading* in accordance with a *meter reading schedule*, by midnight on the second *business day* after the *scheduled read date*; or
 - (4) where the *meter reading* was an *estimated meter reading* or a *substituted meter reading* by midnight on the second *business day* after the *scheduled read date*.
- (c) Where, pursuant to clause 4.8, AEMO delivers a *registration notice* in respect of a *distribution supply point* to the *Distributor* in whose *distribution area* that *distribution supply point* is located, that *Distributor* must use its reasonable endeavours to:
 - (i) provide to the *Market Participant* that has been registered as the *FRO* for the *distribution supply point* the information referred to in clause 2.6.2(a) (excluding *base reading*, *flow*, *consumed energy* and the *average heating value* used to calculate the *consumed energy*) in respect of the *validated meter reading* referred to in clause 2.1.5(b)(i), 2.1.5(b)(ia), 2.1.5(b)(ib) or 2.1.5(b)(ii), which *validated meter reading* is the *reference reading* for the purposes of this clause 2.6.2 (whether that reading was obtained from a *special read* of the *meter* or as a result of a read conducted in accordance with a *meter reading schedule*); and
 - (ii) where the *proposed transfer date* nominated in the *transfer request* is a *prospective transfer date*, provide to the person who was the *FRO* for that *distribution supply point* immediately prior to the registration of the new *FRO* for that *distribution supply point* the information referred to in clause 2.6.2(a) in respect of the *validated meter reading* referred to in clause 2.1.5(b)(i), 2.1.5(b)(ia) or 2.1.5(b)(ib), which *validated meter reading* is the *reference reading* for the purposes of this clause 2.6.2 (where that reading was obtained from a *special read* of the *meter*),

by 5.00 pm on the first *business day* following the day on which the *Distributor* receives the *registration notice*.

- (d) Where, pursuant to clause 2.1.5, the *Distributor* has provided:
- (i) to the *FRO* for a *distribution supply point* any of the information referred to in clause 2.6.2(a); or
 - (ii) to AEMO any of the information referred to in clause 2.6.2(b),
- the *Distributor* will have satisfied its obligations under clause 2.6.2(a) or 2.6.2(b) (as applicable) with respect to the information provided under clause 2.1.5.
- (e) Where AEMO delivers a *registration notice* in respect of a *distribution supply point* under clause 4.8 to the relevant *Distributor*, the previously registered *FRO* will cease to be entitled to receive energy data under clause 2.6.2(a) in respect of any period after the effective date of the relevant registration from the later of:
- (i) the end of the *business day* on which the *registration notice* was received by the *Distributor*; and
 - (ii) if the *registration notice* was received after 5.00 pm on a *business day*, 9.00 am on the next *business day*.

2.6.3 Energy Data required by AEMO

- (a) AEMO must, at least once every two months, use its reasonable endeavours to review all information received by it from each *Distributor* pursuant to Chapter 2 of these *Procedures* in respect of *meters* relating to *second tier supply points* for the purpose of determining whether it has been provided with all of the information which *Distributors* are required to provide to it in respect of those *meters* pursuant to Chapter 2 of these *Procedures*.
- (b) If that review reveals that a *Distributor* has not provided to AEMO all of the information which the *Distributor* is required to provide pursuant to Chapter 2 of these *Procedures* in respect of such *meters*, AEMO must notify the *Distributor* as soon as practicable and the *Distributor* must use its reasonable endeavours to provide the relevant information to AEMO by 5.00 pm on the first *business day* following the day on which AEMO gives that notice to the *Distributor*.

2.7 Data Change

2.7.1 Request for Verification

The *FRO* for a *distribution supply point* which is located in the *distribution area* of a *Distributor* may request the *Distributor* to verify specified information provided by the

Distributor to it pursuant to these *Procedures* in relation to a *meter* relating to that *distribution supply point*.

2.7.2 Distributor to Verify Information

- (a) The *Distributor* must, as soon as reasonably practicable, verify that specified information in any manner it considers appropriate (including by way of a *special read*) and must use its reasonable endeavours to provide the results of that verification (together with details of the method by which that specified information was verified) to the *FRO* who requested the verification by 5.00 pm on the first *business day* following the day on which the verification is concluded.
- (b) If the verification reveals that the specified information is materially incorrect, then the *Distributor* must use its reasonable endeavours:
 - (i) to make such changes to the information included in its *meter data database* as are necessary to correct that information;
 - (ii) to provide the new information the subject of a change under clause 2.7.2(b)(i) to the *FRO* who requested the verification by 5.00 pm on the first *business day* following the day on which the verification is concluded; and
 - (iii) to provide the information the subject of a change under clause 2.7.2(b)(i), and which is required by AEMO under these *Procedures*, to AEMO by midnight on the first *business day* following the day on which the verification is concluded.

2.8 Profiling

2.8.1 Data for Profiling

- (a) [Deleted]
- (b) Where a *FRO* requests a *Distributor* to install a *meter*, the *FRO* must provide to the *Distributor*, at the time of that request, a *customer characterisation* for the *distribution supply point* to which that *meter* will relate.
- (c) Where:
 - (i) pursuant to clause 4.8, AEMO delivers a registration notice in respect of a *distribution supply point* to the *Distributor* in whose *distribution area* the *distribution supply point* is located; and
 - (ii) the *distribution supply point* is a *second tier supply point*,the *Distributor* must use its reasonable endeavours to provide to AEMO a *base load* and a *temperature sensitivity factor* for that *distribution supply point* by midnight on the second *business day* following the day on which the *Distributor* receives the *registration notice*.

- (d) Each *Distributor* must use its reasonable endeavours to provide to AEMO a new *base load* and a new *temperature sensitivity factor* for each *distribution supply point* in its *distribution area* that is a *second tier supply point* by midnight on the *business day* before 30 April and 31 October of each year
- (e) For the purposes of clauses 2.8.1(c) and 2.8.1(d), the *base load* and the *temperature sensitivity factor* for a *distribution supply point* must be determined by the *Distributor* as follows:
 - (i) where there is 12 months of consumption history for that *distribution supply point*, in accordance with clause 2.5 of Attachment 6; or
 - (ii) where there is not 12 months of consumption history for that *distribution supply point*, in accordance with clause 2.2.3 of Attachment 4.

2.8.2 Profile Preparation and Application

- (a) AEMO must apply the *net system load profile methodology* to apportion into *gas days*, for *settlement* purposes, the *consumed energy* in relation to each *meter* that relates to a *second tier supply point* connected to the declared distribution system.
- (b) AEMO must apportion the *consumed energy* in relation to each *meter* that relates to a *supply point* connected to a distribution pipeline that is not part of a declared distribution system, in accordance with *published* procedures agreed from time to time between AEMO, the relevant *Distributor* and other affected *Market Participants*.

2.8.3 Provision of Information to FROs

- (a) By midnight on the third *business day* after the relevant *gas day*, AEMO must provide to each *FRO* for a *distribution supply point* the aggregate of the *consumed energy* in relation to each meter that relates to a *second tier supply point* and in respect of which it is the *FRO*, which *consumed energy* has been apportioned into that *gas day* by the application of the *net system load profile methodology*.
- (b) AEMO must:
 - (i) recalculate the aggregate of the *consumed energy* referred to in clause 2.8.3(a) in accordance with clause 2.4.2 of Attachment 6; and
 - (ii) provide that aggregate to the relevant *FRO* by midnight on the first *business day* after its calculation.

2.8.4 Publication of Information on Market Information Bulletin Board

- (a) AEMO must use its reasonable endeavours to calculate an *effective degree day* for each day of the calendar year in accordance with clause 3 of Attachment 6 and must *publish* the *effective degree day* for each day on the

market information bulletin board by midnight on the first *business day* following the day to which the *effective degree day* relates.

- (b) AEMO must *publish* the *NSL* for each *Distributor's* part of a declared distribution system and each distribution pipeline that is not part of a declared distribution system for each day of each month on the *market information bulletin board* by midnight on the third *business day* following the day to which the *NSL* relates.
- (c) AEMO must:
 - (i) recalculate the *NSL* for each *Distributor's* part of a declared distribution system in accordance with clause 1.1 of Attachment 6;
 - (ii) recalculate the *NSL* for each distribution pipeline that is not part of a declared distribution system in accordance with *published* procedures agreed from time to time between AEMO and the relevant *Distributor*; and
 - (iii) *publish* the recalculated *NSL* described in clauses 2.8.4 (c) (i) and (ii) for each day of each month on the *market information bulletin board* by midnight on the first *business day* after its calculation.
- (d) AEMO must make available to *Retailers* the *NSL* for each *Distributor's* part of a declared distribution system and each distribution pipeline that is not part of a declared distribution system for each day of the previous three years.

2.9 Meter Management

2.9.1 Basic meter installation

- (a) If a *Retailer* requests the *Distributor* to install a *new basic meter* for a *supply point*, the *Distributor* must install that *new basic meter* as soon as reasonably practicable and in such a manner as to comply with the requirements of the *Distribution Code* and any applicable laws. Where the *Retailer* requests a replacement *basic meter* (including by reason of there being a fault, malfunction or defect in relation to the existing *basic meter* or the existing *basic meter* having been damaged or destroyed), the *Distributor* must install the *replacement basic meter* as soon as reasonably practicable after it has satisfied itself that the in situ meter is no longer compliant with the requirements of the *Distribution Code* and any applicable laws.
- (b) Notwithstanding clause 2.9.1(a), a *Distributor* is not required to install a *new basic meter* unless all requirements of applicable laws and regulatory instruments that are required to be satisfied before such a *basic meter* can be installed have been satisfied.
- (c) The *Distributor* must comply with clause 2.9.2(a)(i) in relation to the *meter* (if any) which the *new basic meter* replaces.
- (d) The *Distributor* must *read* the *new basic meter* on the date of its installation.

- (e) Where a *new basic meter* or *replacement basic meter* has been installed by a *Distributor*, the *Distributor* must use its reasonable endeavours:
 - (i) to include the relevant details relating to the new *basic meter* in its *installation database*, its *MIRN database* and its *meter data database*;
 - (ii) to provide to the *Retailer* that requested the installation of a *new basic meter* details of the *MIRN* for the *distribution supply point* to which the *meter* relates, together with the *actual meter readings* obtained under clauses 2.9.1(c) and 2.9.1(d) (or, where appropriate, a *substituted meter reading*) and, such other information for customer account establishment and billing purposes as is specified in the *Gas Interface Protocol*, to the *Retailer* for that *distribution supply point*; and
 - (iii) where the *distribution supply point* is new and is a *second tier supply point*, to provide to AEMO all the relevant details which are required for the purposes of updating the *metering register*,

by 5.00 pm on the fifth *business day* after the day on which the *new basic meter* is installed.

2.9.2 Decommission or Disconnecting of basic meters

- (a) Where a *Distributor* decommissions a *basic meter* relating to a *distribution supply point* that is located in the distribution area of that *Distributor*, the *Distributor* must:
 - (i) on the date of *decommissioning* the *basic meter*, read that *meter*, and
 - (ii) use its reasonable endeavours:
 - (A) to include the relevant details relating to the *basic meter* in its *installation database*, its *MIRN database* and its *meter data database* (and to make such changes to the details included in those databases as are necessitated by the *decommissioning* of that *basic meter*); and
 - (B) to provide the *actual meter reading* obtained under clause 2.9.2(a)(i) (or, where appropriate, a *substituted meter reading*) as well as the date of the *decommissioning* of that *distribution supply point* to the *FRO* for that *distribution supply point*; and
 - (C) to provide to AEMO the information referred to in clause 2.6.2(b) in respect of the *meter reading* referred to in clause 2.9.2(a)(ii)(B) (which *meter reading is the reference reading* for the purposes of clause 2.6.2) and (where that *distribution supply point* is a *second tier supply point*) a notice that the *meter* is *decommissioned*,

by 5.00 pm on the fifth *business day* following the day on which the *meter* is read.

2.9.3 Basic meter upgrade

- (a) If a *Retailer* who is the *FRO* for a *distribution supply point* that is located in the *distribution area* of a *Distributor* requests the *Distributor* to upgrade a *basic meter* by installing a *data logger*, the *Distributor* must use its reasonable endeavours to install that *data logger* (and commission any associated data reading infrastructure in cooperation with AEMO) within twenty *business days* after the day on which that request is delivered to the *Distributor* and in such a manner as to comply with the requirements of the *Distribution Code*, Part 19 of the Rules and any applicable laws.
- (b) Where a *basic meter* has been upgraded by a *Distributor*, the *Distributor* must use its reasonable endeavours:
 - (i) to include the relevant details relating to the *meter* in its *installation database*, its *MIRN database* and its *meter data database*; and
 - (ii) to provide to AEMO all the relevant details relating to the *meter* which are required for the purposes of updating the *metering register* and recording that *meter* as an *interval meter* in the *metering register*,

by 5.00 pm on the fifth *business day* following the day on which the *basic meter* is upgraded.

2.9.4 Time Expired Meters

If a *Distributor* identifies a class of *basic meters* that is required to be replaced on the basis of having reached the life expectancy of that class of meter, the *Distributor* must:

- (a) notify each *FRO* for a *distribution supply point* to which a *meter* which is a member of that class relates of its intention to replace all *meters* in that class;
- (b) ensure that the *meters* to be replaced will be replaced by *meters* which comply with the requirements of the *Distribution Code* and any applicable laws; and
- (c) remove the *meters* requiring replacement and install the replacement *meters* in accordance with clauses 2.9.2 and 2.9.1 (as if the *Retailer* had requested the installation of the replacement *meter*) respectively.

2.9.5 [Delete]

2.9.5A Commissioning of decommissioned distribution supply point

If a *Distributor* commissions a *distribution supply point* which has previously been decommissioned and is located in the *distribution area* of that *Distributor*, the *Distributor* must use its reasonable endeavours to notify the *FRO* for that *distribution supply point*, as well as (where that *distribution supply point* is a *second tier supply point*) AEMO, of the date of the commissioning of that *distribution supply point* by

5.00 pm on the fifth *business day* following the day on which the *distribution supply point* is commissioned.

2.9.6 Deregistration of distribution supply points

If a *Distributor* deregisters a *distribution supply point* which is located in the *distribution area* of that *Distributor*, the *Distributor* must use its reasonable endeavours to notify both the *FRO* for that *distribution supply point* and where that *distribution supply point* is a *second tier supply point*, AEMO, by 5.00 pm on the first *business day* following the day on which the *distribution supply point* is deregistered, of the date of the deregistration of that *distribution supply point*.

2.9.7 Metered supply points

- (a) A *Distributor* must calculate the total number of metered *supply points* in its part of a declared distribution system and any distribution pipelines that are not part of a declared distribution system operated by the *Distributor* as at midnight on the last calendar day of each month.
- (b) The *Distributor* must by 5:00pm on the fifth *business day* after the end of a calendar month provide AEMO with the details referred in clause 2.9.7(a).

CHAPTER 3 – MIRN DISCOVERY PROCESSES

3.1 MIRN database

3.1.1 Creation, maintenance and administration of MIRN database by Distributors

Each *Distributor* must create, maintain and administer a database in relation to all of the *distribution supply points* that are located in the *distribution area* of that *Distributor*, such database to include the following information in respect of each such *distribution supply point* and the *meter* that relates to that *distribution supply point*:

- (a) the *discovery address* and any other site address information specified in the *Gas Interface Protocol*;
- (b) the *MIRN*;
- (c) the *meter number*;
- (d) the *pressure correction factor*;
- (e) if the *meter* that relates to that *distribution supply point* is a *basic meter*:
 - (i) the *customer characterisation*;
 - (ii) the date to which the most recent *validated meter reading* for that *meter* (other than an *estimated meter reading*) pertains;
 - (iii) the next date on which that *meter* is to be read in accordance with the applicable *meter reading schedule*; and
 - (iv) the next known date (if any) on which a *special read* is to occur in relation to that *meter*;
- (f) if the *meter* that relates to that *distribution supply point* is an *interval meter*, the type of communication equipment (if any) used by that *meter*;
- (g) the *transmission zone* in which that *distribution supply point* is located;
- (h) the *tariff zone* in which that *distribution supply point* is located;
- (i) the *heating value zone* in which that *distribution supply point* is located;
- (j) the *distribution tariffs* applicable to that *distribution supply point*;
- (k) whether the *meter* that relates to that *distribution supply point* has been plugged or disconnected; and
- (l) [Deleted]
- (m) any other charges charged by the *Distributor* that apply in relation to that *distribution supply point*, the *meter* which relates to that *distribution supply*

point or the equipment and installations associated with that *meter*, together with the date of expiry of the period in respect of which those charges apply.

3.1.2 Updating MIRN Database

Except as otherwise provided in clause 2.9 in relation to the period within which such information must be provided, each *Distributor* must use its reasonable endeavours to ensure that the information required to be included in its *MIRN database* is included in the *MIRN database* by midnight on the first *business day* following the day on which that information is obtained or calculated by the *Distributor*.

3.2 MIRN discovery request

3.2.1 Request

Subject to clause 3.2.2(a), any *Market Participant* or AEMO may deliver a *MIRN discovery request* in relation to a *distribution supply point* to a *Distributor*. A *MIRN discovery request* must include at least the *MIRN* or the mandatory components of *discovery address* for the *distribution supply point* to which the *MIRN discovery request* relates.

3.2.2 Explicit Informed Consent

- (a) A *Market Participant* must not deliver a *MIRN discovery request* in relation to a *distribution supply point* to a *Distributor* unless:
 - (i) the *Market Participant* has received the *explicit informed consent* of the *subject customer* to the provision by the *Distributor* to that *Market Participant* of the information referred to in clause 3.1.1 in respect of that *distribution supply point*, or
 - (ii) the *Market Participant* is the *subject customer* in relation to that *distribution supply point*.
- (b) A *Market Participant* who delivers a *MIRN discovery request* in relation to a *distribution supply point* to a *Distributor* is taken to have represented to the *Distributor* that either:
 - (i) the *Market Participant* has received the *explicit informed consent* of the *subject customer* to the provision by the *Distributor* to that *Market Participant* of the information referred to in clause 3.1.1 in respect of that *distribution supply point*, or
 - (ii) the *Market Participant* is the *subject customer* in relation to that *distribution supply point*.
- (c) AEMO is not required to obtain the *explicit informed consent* of the *subject customer* in relation to a *distribution supply point* to the provision by the *Distributor* to AEMO of the information relating to that *distribution supply point* which is referred to in clause 3.1.1.

3.3 Response to MIRN discovery request

3.3.1 Street/Suburb Combination Listing

- (a) Each *Distributor* must make available in an electronic form, which can be remotely accessed and electronically searched by all *Market Participants* and AEMO, a listing (which complies with clause 3.3.1(b)) of every *street/suburb combination* that is recorded in the *MIRN database* of that *Distributor*.
- (b) The entry relating to each *street/suburb combination* in the listing referred to in clause 3.3.1(a) must exactly replicate the mandatory components of the *discovery address* (other than the street number or its equivalent) as it is recorded in the *MIRN database* of the relevant *Distributor*, including without limitation:
 - (i) any abbreviations contained in the corresponding entry in the *MIRN database* (eg. St, Str, Ave, Rd);
 - (ii) any capital and lower case letters contained in the corresponding entry in the *MIRN database* (eg. Alberts road, foley Street);
 - (iii) any spaces contained in the corresponding entry in the *MIRN database* (eg. Riley Street, Riley Street, Beau maris, Be aumaris); and
 - (iv) any misspellings contained in the corresponding entry in the *MIRN database* (eg. Beaumorris, Beau-maris),provided however that the listing is not required to include an entry which, if it were so included, would exactly replicate an existing entry in that listing.
- (c) The relevant *Distributor* must ensure that:
 - (i) at least once every calendar month, the information required to be included in the listing referred to in clause 3.3.1(a) is updated, so that the listing contains the details of every *street/suburb combination* in respect of which a *discovery address* is recorded in the *MIRN database* of that *Distributor*, and
 - (ii) the listing referred to in clause 3.3.1(a) specifies the most recent date on which it was so updated.
- (d) If AEMO or a *Retailer* or a *Distributor* becomes aware of a change to the details of a *discovery address*:
 - (i) AEMO or the *Retailer* must use its reasonable endeavours to provide the changed details to the *Distributor* in whose *distribution area* the *distribution supply point* for that *discovery address* is located; and
 - (ii) the *Distributor* must use its reasonable endeavours to provide the changed details to the *Retailer* who is the *FRO* for the *distribution supply point* for that *discovery address*,

as soon as practicable after becoming aware of the change.

3.3.1A Complete MIRN Listing

- (a) Each *Distributor* must use its reasonable endeavours to update, format and deliver a new *complete MIRN listing* in accordance with the *Gas Interface Protocol* which is to be made available to AEMO by 5.00pm on the fifth *business day* after the end of the calendar month or as otherwise agreed from time to time by all relevant parties.

(a1) AEMO must make each *complete MIRN listing* available to all *Retailers* after it is received from the *Distributor*.

- (b) The *Retailer* must ensure that the *complete MIRN listing* is accessed and used solely to confirm the relevant *discovery address/MIRN* details of the *subject customer*, and
- (c) The *Retailer* must ensure that the *subject customer* has provided *explicit informed consent* to access and use the *complete MIRN listing* to confirm the relevant *discovery address/MIRN* details of the *subject customer* in relation to the *distribution supply point*.

3.3.2 Distributor Response

- (a) Provided that the *discovery address* or the *MIRN* (if any) specified in the *MIRN discovery request* exactly replicates (in the sense that term is used in clause 3.3.1(b)) a *discovery address*, or corresponds with a *MIRN*, contained in the *MIRN database* of the relevant *Distributor*, the *Distributor* must use its reasonable endeavours to provide to the *Market Participant* or AEMO (as the case may be), within the time periods set out below, the following information in respect of the *distribution supply point* to which that *discovery address* or *MIRN* relates (such information being identified by reference to that *discovery address* or *MIRN*):
 - (i) by midnight on the first *business day* following the day on which the *MIRN discovery request* is delivered to the *Distributor*:
 - (A) the current information set out in clauses 3.1.1(a) to (k); and
 - (B) either:
 - (1) the current information set out in clauses 3.1.1(l) and (m); or
 - (2) a statement as to whether or not there are any charges of the kind referred to in clauses 3.1.1(l) and (m); and
 - (ii) by midnight on the second *business day* following the day on which the *MIRN discovery request* is delivered to the *Distributor*, the current information set out in clauses 3.1.1(l) and (m) where that information has not already been provided pursuant to clause 3.3.2(a)(i)(B)(1).

- (b) Provided that the *discovery address* specified in the *MIRN discovery request* exactly replicates (in the sense that term is used in clause 3.3.1(b)) a *discovery address*, of multiple *MIRNs* contained in the *MIRN database* of the relevant *Distributor*, the *Distributor* must use its reasonable endeavours to provide to the *Market Participant* or AEMO (as the case may be), by midnight on the first *business day* following the day on which the *MIRN discovery request* is delivered to the *Distributor*, the current information set out in clauses 3.1.1(a), (b) and (c); in respect of up to the first 99 *distribution supply points* to which that *discovery address* relates (such information being identified by reference to that *discovery address*). If there are 100 or more *MIRNs* contained in the *MIRN database* of the relevant *Distributor* with a matching *discovery address*, then the *Distributor* must also advise the *Market Participant* or AEMO (as the case may be) of this fact.
- (c) On delivery of the information referred to in clause 3.3.2(b) by the *Market Participant* or AEMO to the *Distributor*, the provisions of this clause 3.3.2 apply to the *Distributor* as if the *MIRN discovery request* had been delivered to the *Distributor* at that time and had contained that information.
- (d) If the *discovery address* or the *MIRN* (if any) specified in a *MIRN discovery request* does not exactly replicate (in the sense that term is used in clause 3.3.1(b)) a *discovery address*, or correspond with a *MIRN*, contained in the *MIRN database* of the relevant *Distributor*, the *Distributor* must use its reasonable endeavours to notify the *Market Participant* or AEMO (as the case may be) of that fact by midnight on the first *business day* following the day on which the *MIRN discovery request* is delivered to the *Distributor*.

3.4 Assistance in searching

- (a) If, pursuant to clause 3.3.2(d), a *Market Participant* or AEMO is notified that the *discovery address* or *MIRN* relating to the *distribution supply point* in respect of which a *MIRN discovery request* has been made cannot be found in the *MIRN database* of the relevant *Distributor*, the *Market Participant* or AEMO (as the case may be) may request that the *Distributor* assist in the location of that *discovery address* or *MIRN* in that *MIRN database*, in which case the *Distributor* must use its reasonable endeavours to provide that assistance:
 - (i) where the request for assistance is made before midday on a day that is a *business day* – by 5.00 pm on that *business day*; and
 - (ii) where the request for assistance is made on or after midday on a day that is a *business day*, or is made on a day that is not a *business day* – by 5.00 pm on the first *business day* following the day on which the request is made.
- (b) For the avoidance of doubt, clause 3.4(a) only requires the *Distributor* to use its reasonable endeavours to assist the *Market Participant* or AEMO to obtain the *discovery address* or *MIRN* relating to the relevant *distribution supply*

point, for the purposes of enabling the *Market Participant* or AEMO to make a further *MIRN discovery request* in relation to that *distribution supply point*.

3.5 MIRN allocation

3.5.1 Allocation to distribution supply points

- (a) AEMO must allocate to each *Distributor* a set of numbers which are available for use as metering installation registration numbers for *distribution supply points* which are located in the *distribution area* of that *Distributor*.
- (b) AEMO may from time to time allocate a further set of numbers to a *Distributor* for the purpose set out in clause 3.5.1(a).
- (c) Each number allocated by AEMO pursuant to clauses 3.5.1(a) or (b) must be unique and must not be allocated by AEMO to any other *Distributor* or assigned by AEMO to a *transmission supply point* pursuant to clause 3.5.2(b).
- (d) Each *Distributor* must assign a number, selected from the numbers allocated to it by AEMO pursuant to clauses 3.5.1(a) and (b), to each *distribution supply point* which is located in the *distribution area* of that *Distributor*. The assignment referred to in this clause must be effected by the relevant *Distributor* recording that number in its *MIRN database* as the *MIRN* for the relevant *distribution supply point*.
- (e) Each number assigned to a *distribution supply point* by a *Distributor* pursuant to clause 3.5.1(d) must be unique and must not be allocated by that *Distributor* to any other *distribution supply point*.
- (f) [Deleted]
- (g) To the extent it has been allocated sufficient numbers pursuant to clauses 3.5.1(a) and (b), each *Distributor* must:
 - (i) assign one of those numbers, pursuant to clauses 3.5.1(d) and (e), to each additional *distribution supply point* that comes into existence; and
 - (ii) by midnight on the first *business day* after the day on which that *distribution supply point* comes into existence, notify the prospective *FRO* for that *distribution supply point* of the *MIRN* for that *distribution supply point*.

3.5.2 Allocation to transmission supply points

- (a) AEMO must allocate to itself a set of numbers which are available for use as metering installation registration numbers for *transmission supply points*.
- (b) AEMO may from time to time allocate a further set of numbers to itself for the purpose set out in clause 3.5.2(a).

- (c) Each number allocated by AEMO pursuant to clauses 3.5.2(a) or (b) must be unique and must not be allocated by AEMO to a *Distributor* pursuant to clauses 3.5.1(a) or (b).
- (d) AEMO must assign a number, selected from the numbers allocated to it pursuant to clauses 3.5.2(a) or (b), to each *transmission supply point*. The assignment referred to in this clause must be effected by AEMO recording that number in the *metering register* as the *MIRN* for the relevant *transmission supply point*.
- (e) Each number assigned to a *transmission supply point* by AEMO pursuant to clause 3.5.2(d) must be unique and must not be allocated by AEMO to any other *transmission supply point*.
- (f) [Deleted]
- (g) AEMO must:
 - (i) pursuant to clauses 3.5.2(d) and (e), assign one of the numbers allocated to it as described in clauses 3.5.2(a) and (b) to each additional *transmission supply point* that comes into existence;
 - (ii) by midnight on the first *business day* after the day on which that *transmission supply point* comes into existence, notify the *FRO* for that *transmission supply point* of the *MIRN* for that *transmission supply point*; and
 - (iii) by midnight on the first *business day* after the day on which that *transmission supply point* comes into existence, notify the *transmission system Service Provider* of the *MIRN* for that *transmission supply point*.

CHAPTER 4 – CUSTOMER TRANSFER PROCESSES

4.1 Initiation of transfer

4.1.1 Transfer Request

- (a) Subject to this clause 4.1, a prospective *FRO* must deliver a *transfer request* to AEMO in relation to any *supply point* located on:
 - (i) the declared transmission system; or
 - (ii) a distribution pipeline operated by a *Distributor* that has an existing *metering installation* in place.
- (ai) A prospective *FRO* is only required to deliver a *transfer request* where the *supply point* is currently assigned in the AEMO *metering register* to another *FRO*.
- (aii) A *transfer request* must include the following information in respect of the *supply point* to which that *transfer request* relates:
 - (i) the *MIRN*;
 - (ii) the *proposed transfer date* (see clause 4.1.2);
 - (iii) where the *proposed transfer date* is a *prospective transfer date*, a statement (if such is the case) that it is intended that the person will purchase gas that is delivered at that *supply point* from the *Market Participant* following the registration of that *Market Participant* in the *metering register* as the *FRO* for that *supply point* (a *customer no-change statement*); and
 - (iv) where the *proposed transfer date* is a *retrospective transfer date*, the proposed *registration end date* (if any).
- (b) A *transfer request* must also contain the name of the *Market Participant* who delivered the *transfer request* to AEMO.
- (c) A *Market Participant* must not deliver a *transfer request* in relation to a *supply point* to AEMO where that *Market Participant* is suspended from participating in the market pursuant to Part 19 of the *Rules*.

4.1.2 Proposed Transfer Date

- (a) Where a *transfer request* nominates a *prospective transfer date* as the *proposed transfer date*, and the *supply point* to which the *transfer request* relates is a *distribution supply point*, the *prospective transfer date* must be a day which falls during the *permitted prospective period* for that *transfer request*.

- (b) Where a *transfer request* nominates a *retrospective transfer date* as the *proposed transfer date*, and the *supply point* to which the *transfer request* relates is a *distribution supply point*, the *retrospective transfer date* must be a day (which may be a day other than a *business day*), which falls within the *permitted retrospective period* for that *transfer request* and to which a *validated meter reading* (other than an *estimated meter reading*) pertains.

4.1.3 Retrospective Transfers

A *Market Participant* must not deliver a *transfer request* in relation to a *supply point* to AEMO where the *proposed transfer date* in relation to that *transfer request* is a *retrospective transfer date* unless:

- (a) that *Market Participant*:
 - (i) is a *Market Participant* as at the day on which the *transfer request* is delivered to AEMO; and
 - (ii) was a *Market Participant* at all such times during the *permitted retrospective period* for the *transfer request* when, if that person were to be registered in the *metering register* as the *FRO* for the *supply point* with effect from the *retrospective transfer date* to the *registration end date* (if any), it would have been the *FRO* for that *supply point*; and
- (b) the *retrospectively affected FRO* in relation to that *transfer request* is a *Market Participant* as at the day on which the *transfer request* is delivered to AEMO.

4.1.4 Explicit Informed Consent

- (a) A *Market Participant* must not deliver a *transfer request* in relation to a *supply point* to AEMO which nominates a *prospective transfer date* as the *proposed transfer date* unless:
 - (i) the *Market Participant* has received the *explicit informed consent* of the *subject customer* to the registration of that *Market Participant* in the *metering register* as the *FRO* for that *supply point* with effect from any time during the *permitted prospective period* in relation to the *transfer request*; or
 - (ii) the *Market Participant* is the *subject customer* in relation to that *supply point*.
- (b) A *Market Participant* who delivers a *transfer request* in relation to a *supply point* to AEMO which nominates a *prospective transfer date* as the *proposed transfer date* is taken to have represented to AEMO that either:

- (i) the *Market Participant* has received the *explicit informed consent* of the *subject customer* to the registration of that *Market Participant* in the *metering register* as the *FRO* for that *supply point* with effect from any time during the *permitted prospective period* in relation to the *transfer request*; or
- (ii) the *Market Participant* is the *subject customer* in relation to that *supply point*.

4.1.5 Notification of Existing Transfer Request

Where:

- (a) a *Market Participant* delivers a *transfer request* in relation to a *supply point* to AEMO;
- (b) a *transfer request* in relation to that *supply point* has already been delivered to AEMO (whether by that or any other *Market Participant*); and
- (c) the *transfer request* referred to in clause 4.1.5(b) (the *existing transfer request*) is being processed by AEMO but the *Market Participant* who delivered the *existing transfer request* to AEMO has not yet been registered in the *metering register* as the *FRO* for the *supply point* to which the *existing transfer request* relates,

then AEMO must not process the *transfer request* referred to in clause 4.1.5(a) and must, by midnight on the first *business day* following the day on which that *transfer request* was delivered to AEMO, deliver a notice stating this fact to the *Market Participant* who delivered that *transfer request*.

4.2 Notification of transfer

4.2.1 Notification by AEMO

Provided that clauses 4.1.1 to 4.1.3 and 4.1.5 have been complied with in relation to the *transfer request*, AEMO must, by midnight on the first *business day* following the day on which the *transfer request* was delivered to it, deliver notice of the *transfer request* (a *transfer request notification*) to:

- (a) where the *proposed transfer date* nominated in the *transfer request* is a *prospective transfer date*, the *FRO* for the *supply point* to which the *transfer request* relates;
- (b) where the *proposed transfer date* nominated in the *transfer request* is a *retrospective transfer date*, the *retrospectively affected FRO* in relation to the *transfer request*;
- (c) if that *supply point* is a *distribution supply point* - the *Distributor* in whose *distribution area* that *distribution supply point* is located; and

- (d) if that *supply point* is a *transmission supply point* – the *transmission system Service Provider* with respect to that part of the *transmission system* on which that *transmission supply point* is located.

4.2.2 Transfer Request Notification Information

A *transfer request notification* in relation to a *transfer request* must include the following information:

- (a) the *MIRN* for the *supply point* to which the *transfer request* relates;
- (b) the *proposed transfer date* nominated in the *transfer request*;
- (c) whether the *transfer request* contains a *customer no-change statement*;
- (d) where the *proposed transfer date* nominated in the *transfer request* is a *retrospective transfer date* the proposed *registration end date* (if any);
- (e) in the case of a *transfer request notification* delivered to the *Distributor* for a *distribution supply point*, the name of the *Market Participant* who delivered the *transfer request* to AEMO;
- (f) in the case of a *transfer request notification* delivered to the *transmission system Service Provider* for a *transmission supply point*, the name of the *Market Participant* who delivered the *transfer request* to AEMO.

4.3 Objections to Transfer

4.3.1 Objection Notice

- (a) Where:
 - (i) the *proposed transfer date* nominated in a *transfer request* is a *prospective transfer date* and AEMO, pursuant to clause 4.2.1(a), delivers a *transfer request notification* in relation to that *transfer request* to the *FRO* for the *supply point* to which the *transfer request* relates; or
 - (ii) the *proposed transfer date* nominated in a *transfer request* is a *retrospective transfer date* and AEMO, pursuant to clause 4.2.1(b), delivers a *transfer request notification* in relation to that *transfer request* to the *retrospectively affected FRO* in relation to that *transfer request*,

the *FRO* or the *retrospectively affected FRO* (as the case may be) may deliver to AEMO a notice objecting to the *transfer request* (an *objection notice*) at any time before (but not after) midnight on the fifth *business day* after the day on which AEMO delivered the *transfer*

request notification to the *FRO* or the *retrospectively affected FRO* (as the case may be).

- (b) An *objection notice* in relation to a *transfer request* must include the following information:
 - (i) the *MIRN* for the *supply point* to which the *transfer request* relates; and
 - (ii) the name of the *FRO* or the *retrospectively affected FRO* (as the case may be) who delivered the *objection notice* to AEMO.
- (c) If the *proposed transfer date* nominated in a *transfer request* is a *prospective transfer date*, a *FRO* may only deliver an *objection notice* in relation to that *transfer request* to AEMO where:
 - (i) the *transfer request* contains a *customer no-change statement*; and
 - (ii) at the time the *objection notice* is delivered to AEMO, an *aged debt* is owing to that *FRO* by the person who is then purchasing gas at the *supply point* to which the *transfer request* relates.

4.3.2 Withdrawal of Objection Notice

- (a) A *FRO* or a *retrospectively affected FRO* who delivers an *objection notice* in relation to a *transfer request* to AEMO may withdraw that *objection notice* by delivering to AEMO a notice of withdrawal (an *objection withdrawal notice*) at any time before midnight on the twentieth *business day* after the day on which the *FRO* or the *retrospectively affected FRO* delivered that *objection notice* to AEMO.
- (b) If the *proposed transfer date* nominated in a *transfer request* is a *retrospective transfer date*, a *retrospectively affected FRO* who delivers an *objection notice* in relation to that *transfer request* to AEMO must withdraw that *objection notice* before midnight on the first *business day* after the day (if any) on which the *retrospectively affected FRO* agrees with the *Market Participant* who delivered the *transfer request* to AEMO to withdraw that *objection notice*.
- (c) If the *proposed transfer date* nominated in a *transfer request* is a *prospective transfer date*, a *FRO* who delivers an *objection notice* in relation to that *transfer request* to AEMO must withdraw that *objection notice* where the *aged debt* referred to in clause 4.3.1(c)(ii) is discharged in full, or assigned to another person with the consent of the *FRO*, before midnight on the nineteenth *business day* after the day on which the *FRO* delivered the *objection notice* to AEMO, such withdrawal being effected by the *FRO* delivering to AEMO an *objection*

withdrawal notice before midnight on the first *business day* after that *aged debt* has been paid in full.

- (d) An *objection withdrawal notice* in relation to a *transfer request* must include the *MIRN* for the *supply point* to which the *transfer request* relates.

4.3.3 Notification by AEMO

- (a) AEMO must, by midnight on the first *business day* after the day on which an *objection notice*, or an *objection withdrawal notice*, in relation to a *transfer request* is delivered to it, deliver a notification of that *objection notice* or *objection withdrawal notice*, as the case may be, to:
 - (i) the *Market Participant* who delivered the *transfer request* to AEMO;
 - (ii) if the *supply point* to which the *transfer request* relates is a *distribution supply point* - the *Distributor* in whose *distribution area* that *distribution supply point* is located; and
 - (iii) if the *supply point* to which the *transfer request* relates is a *transmission supply point* – the *transmission system Service Provider* with respect to that part of the *transmission system* on which that *transmission supply point* is located.
- (b) An notification by AEMO under paragraph (a) must include the following information:
 - (i) the *MIRN* for the *supply point* to which the *transfer request* relates; and
 - (ii) the name of the *FRO* or *retrospectively affected FRO* (as the case may be) who delivered the *objection notice* to AEMO.

4.3.4 Termination of Transfer Process

If:

- (a) an *objection notice* in relation to a *transfer request* has been delivered to AEMO by:
 - (i) a *FRO* pursuant to clause 4.3.1 (where the *proposed transfer date* in relation to the *transfer request* is a *prospective transfer date*); or
 - (ii) a *retrospectively affected FRO* pursuant to clauses 4.3.1(a) and (b) (where the *proposed transfer date* in relation to the *transfer request* is a *retrospective transfer date*); and
- (b) by midnight on the twentieth *business day* after the day on which that *objection notice* was delivered to AEMO, that *FRO* or *retrospectively*

affected FRO (as the case may be) has not delivered to AEMO an *objection withdrawal notice* in relation to that *transfer request* pursuant to clause 4.3.2,

then AEMO must:

- (c) cease processing that *transfer request*; and
- (d) by midnight on the twenty first *business day* after the day on which that *objection notice* was delivered to AEMO, deliver a notice that AEMO will not further process that *transfer request* to:
 - (i) the *Market Participant* who delivered the *transfer request* to AEMO;
 - (ii) where the *proposed transfer date* nominated in the *transfer request* is a *prospective transfer date*, the *FRO* for the *supply point* to which the *transfer request* relates;
 - (iii) where the *proposed transfer date* nominated in the *transfer request* is a *retrospective transfer date*, the *retrospectively affected FRO* in relation to the *transfer request*;
 - (iv) if the *supply point* to which the *transfer request* relates is a *distribution supply point* - the *Distributor* in whose *distribution area* that *distribution supply point* is located; and
 - (v) if the *supply point* to which the *transfer request* relates is a *transmission supply point* – the *transmission system Service Provider* with respect to that part of the *transmission system* on which that *transmission supply point* is located.

4.4 Potential Problems with Transfer

4.4.1 Notification of potential problems

- (a) Any person who has received a *transfer request notification* in relation to a *transfer request* pursuant to clause 4.2 may deliver to AEMO, at any time before that *Market Participant* is registered by AEMO in the *metering register* as the *FRO* for the *supply point* to which that *transfer request* relates, a notice describing a potential problem in respect of that *transfer request*.
- (b) A notice delivered by a person pursuant to clause 4.4.1(a) does not constitute an *objection notice* for the purposes of clause 4.3.1.

4.4.2 Notification by AEMO

AEMO must, by midnight on the first *business day* after the day on which a notice described in clause 4.4.1 is delivered to it, forward that notice to the *Market Participant* who delivered to AEMO the *transfer request* to which that notice relates.

4.5 Withdrawal of transfer request

4.5.1 Transfer Withdrawal Notice

- (a) A *Market Participant* who delivers a *transfer request* to AEMO:
 - (i) may deliver a notice withdrawing that *transfer request* (a *transfer withdrawal notice*) to AEMO at any time before (but not after) the registration of that *Market Participant* in the *metering register* as the *FRO* for the *supply point* to which the *transfer request* relates; and
 - (ii) must immediately withdraw that *transfer request* where it ceases to be a *Market Participant* at any time before the registration of that *Market Participant* in the *metering register* as the *FRO* for the *supply point* to which the *transfer request* relates, such *withdrawal* being effected by that person immediately delivering a *transfer withdrawal notice* to AEMO.
- (b) A *transfer withdrawal notice* in relation to a *transfer request* must include the *MIRN* for the *supply point* to which the *transfer request* relates.

4.5.2 Termination of Transfer Process

AEMO must cease processing a *transfer request* if the *Market Participant* who delivered that *transfer request* delivers to AEMO, pursuant to clause 4.5.1, a *transfer withdrawal notice* in relation to that *transfer request*.

4.5.3 Notification by AEMO

AEMO must, by midnight on the first *business day* after the day on which a *transfer withdrawal notice* in relation to a *transfer request* is delivered to it, deliver notice of the withdrawal of the *transfer request*, together with a notice that AEMO will not further process that *transfer request*, to:

- (a) where the *proposed transfer date* nominated in the *transfer request* is a *prospective transfer date*, the *FRO* for the *supply point* to which the *transfer request* relates;

- (b) where the *proposed transfer date* nominated in the *transfer request* is a *retrospective transfer date*, the *retrospectively affected FRO* in relation to the *transfer request*;
- (c) if that *supply point* is a *distribution supply point* - the *Distributor* in whose *distribution area* that *distribution supply point* is located; and
- (d) if that *supply point* is a *transmission supply point* - the *transmission system Service Provider* with respect to that part of the *transmission system* on which that *transmission supply point* is located.

4.5A Ineligible Transfers

4.5A.1 Prohibited Transfer Requests

A *Market Participant* must use reasonable endeavours not submit a *transfer request* relating to a *supply point* unless it holds all necessary rights to supply gas to that *supply point*.

4.5A.2 Withdrawal of Prohibited Transfer Requests

A *Market Participant* who submits a *transfer request* that is prohibited by clause 4.5A.1 must withdraw the *transfer request* as soon as practicable.

4.5A.3 Register of Authorised Supply Points

- (a) AEMO must maintain a register of *network sections* that each *Market Participant* is entitled to supply gas to *supply points* within that *network section*.
- (b) *Market Participants* must advise AEMO of *network sections* where they hold all necessary rights to supply gas.
- (c) AEMO may request a service provider to confirm that information provided under clause 4.5A.3(b) is correct

4.5A.4 Termination of Transfer Process

AEMO must cease processing a *transfer request* if it related to a *supply point* that is not included in the register, maintained under clause 4.5A.3, as a *supply point* that the *Market Participant* is entitled to supply gas to;

4.6 Registration of prospective transfer

4.6.1 Registration

Where:

- (a) a *Market Participant* has delivered to AEMO a *transfer request* in relation to a *supply point* which complies with clause 4.1.1;
- (b) the *proposed transfer date* nominated in the *transfer request* is a *prospective transfer date* which complies with clause 4.1.2(a);
- (c) the *FRO* for the *supply point* to which the *transfer request* relates:
 - (i) has not delivered to AEMO, by midnight on the fifth *business day* after the day on which AEMO delivered to it the *transfer request notification* in relation to the *transfer request*, an *objection notice* in relation to the *transfer request* pursuant to clause 4.3.1; or
 - (ii) has delivered such an *objection notice* but has subsequently delivered to AEMO an *objection withdrawal notice* in relation to the *transfer request* pursuant to clause 4.3.2; and
- (d) if the *supply point* to which the *transfer request* relates is a *distribution supply point* and the *meter* which relates to that *supply point* is a *basic meter*, the following information has been delivered to AEMO, prior to the expiration of the *data provision period*, by the *Distributor* in whose *distribution area* the *supply point* is located:
 - (i) the day to which a *validated meter reading* (other than an *estimated meter reading*) referred to in clause 2.1.5(b) pertains, such day being within the *allowable period*, and closest to, or on the *proposed transfer date*, and
 - (ii) the information referred to in clause 2.6.2(b) in relation to that *validated meter reading* (which *validated meter reading* is the *reference reading* for the purposes of clause 2.6.2),

then, unless the *Market Participant* who delivered the *transfer request* to AEMO:

- (e) is no longer a *Market Participant*; or
- (f) has delivered to AEMO a *transfer withdrawal notice* in relation to the *transfer request* pursuant to clause 4.5.1,

AEMO must ~~at expiration of the data provision period~~, as soon as is practicable, register that *Market Participant* in the AEMO *metering register* as the *FRO* for the *supply point* to which that *transfer request* relates.

4.6.2 Read Failure

- (a) If:
- (i) the conditions described in clause 4.6.1(a) to (c) have been satisfied in respect of a *transfer request*, but
 - (ii) by the expiration of the *data provision period*, AEMO has not been notified, in accordance with clause 4.6.1(d), of the information specified in that clause,
- then AEMO must, by midnight on the first *business day* after the expiration of the *data provision period*, deliver a notice stating this fact (a *read failure notice*) to:
- (iii) the *Market Participant* who delivered the *transfer request* to AEMO;
 - (iv) the *FRO* for the *supply point* to which the *transfer request* relates;
 - (v) if that *supply point* is a *distribution supply point* - the *Distributor* in whose *distribution area* that *distribution supply point* is located; and
 - (vi) if that *supply point* is a *transmission supply point* - the *transmission system Service Provider* with respect to that part of the *transmission system* on which that *transmission supply point* is located.
- (b) A *read failure notice* in relation to a *transfer request* must include the following information:
- (i) the *MIRN* for the *supply point* to which the *transfer request* relates; and
 - (ii) the information that has not been provided or obtained as required pursuant to clause 4.6.1(d).

4.6.3 Alternative Transfer Date

- (a) Where AEMO delivers a *read failure notice* under clause 4.6.2 to the *Market Participant* who delivered to AEMO the *transfer request* to which the *read failure notice* relates, that *Market Participant* may deliver to AEMO, at any time before (but not after) midnight on the tenth *business day* after the day on which AEMO delivered the *read failure notice* to that *Market Participant* a notice (an *alternative transfer date notice*) which nominates a new *prospective transfer date* in relation to that *transfer request*, such *prospective transfer date* being a day:
- (i) which is on or after the *prospective transfer date* nominated in the *transfer request*; and

- (ii) which falls during the *permitted prospective period* in relation to the *transfer request*.
- (b) An *alternative transfer date notice* in relation to a *transfer request* must include the following information:
 - (i) the *MIRN* for the *supply point* to which the *transfer request* relates; and
 - (ii) the proposed new *prospective transfer date* in relation to the *transfer request*.
- (c) If the *Market Participant* referred to in clause 4.6.3(a) delivers an *alternative transfer date notice* to AEMO pursuant to that clause, then AEMO must, by midnight on the first *business day* after the day on which the *Market Participant* delivered the *alternative transfer notice* to AEMO, deliver notice of the *alternative transfer date notice* (an *alternative transfer date notification*) to:
 - (i) the *FRO* for the *supply point* to which the relevant *transfer request* relates;
 - (ii) if that *supply point* is a *distribution supply point* - the *Distributor* in whose *distribution area* that *distribution supply point* is located; and
 - (iii) if that *supply point* is a *transmission delivery point* - the *transmission system Service Provider* with respect to that part of the *transmission system* on which that *transmission supply point* is located.
- (d) An *alternative transfer date notification* in relation to an *alternative transfer date notice* must include the following information:
 - (i) the *MIRN* for the *supply point* to which the relevant *transfer request* relates; and
 - (ii) the proposed new *prospective transfer date* in relation to the *transfer request*.
- (e) Where a *Market Participant* delivers to AEMO an *alternative transfer date notice* in relation to a *transfer request* pursuant to clauses 4.6.3(a) and 4.6.3(b), the provisions of this clause 4.6 and of clause 2.1.5(b) will apply as if the *proposed transfer date* specified in the *transfer request* to which the *alternative transfer date notice* relates was the *prospective transfer date* which is nominated in the *alternative transfer date notice*.

4.6.4 Termination of Transfer Process

If:

- (a) pursuant to clause 4.6.2, AEMO has delivered a *read failure notice* in relation to a *transfer request* to the *Market Participant* who delivered that *transfer request* to AEMO; and
- (b) that *Market Participant* does not deliver an *alternative transfer date notice* to AEMO pursuant to clause 4.6.3,

then AEMO must cease processing the relevant *transfer request* and must, by midnight on the eleventh *business day* after the day on which AEMO delivered the *read failure notice* to that *Market Participant*, deliver a notice to:

- (c) that *Market Participant*;
- (d) the *FRO* for the *supply point* to which the *transfer request* relates;
- (e) if that *supply point* is a *distribution supply point* - the *Distributor* in whose *distribution area* that *distribution supply point* is located; and
- (f) if that *supply point* is a *transmission supply point* - the *transmission system Service Provider* with respect to that part of the *transmission system* on which that *transmission supply point* is located,

which states that AEMO will not further process that *transfer request*.

4.6.5 Registration Date

- (a) Where, pursuant to clause 4.6.1, AEMO registers a *Market Participant* in the *metering register* as the *FRO* for a *supply point*, that registration will be deemed to take effect:
 - (i) where the *meter* that relates to that *supply point* is a *basic meter*, at 6.00 am on the day to which the *validated meter reading* pertains as described in clause 4.6.1(d); or

Note: Because the *meter* must be *read* on a day, or the *substituted meter reading* must pertain to a date, that is within the *allowable period* in relation to the *proposed transfer date*, it is possible for the new *FRO* for the *supply point* to be registered in the *metering register* with effect from a day prior to the day on which the *transfer request* is delivered to AEMO (ie. where the *proposed transfer date* is less than four *business days* after the day on which the *transfer request* was delivered to AEMO).

- (ii) where the *meter* that relates to that *supply point* is an *interval meter*, at 6.00 am on the *prospective transfer date*.

- (b) AEMO must record both the date on which such registration takes place and the date on which such registration is deemed to take effect in the *metering register*.

4.7 Registration of retrospective transfer

4.7.1 Registration Requirements

Where:

- (a) a *Market Participant* has delivered to AEMO a *transfer request* in relation to a *supply point* which complies with clause 4.1.1;
- (b) the *proposed transfer date* nominated in that *transfer request* is a *retrospective transfer date* which complies with clause 4.1.2(b);
- (c) clause 4.1.3 has been complied with in relation to the *transfer request*, and
- (d) the *retrospectively affected FRO* in relation to that *transfer request*.
 - (i) has not delivered to AEMO, by midnight on the fifth *business day* after the day on which AEMO delivered to it the *transfer request notification* in relation to the *transfer request*, an *objection notice* in relation to the *transfer request* pursuant to clauses 4.3.1(a) and (b); or
 - (ii) has delivered such an *objection notice* but has subsequently delivered to AEMO an *objection withdrawal notice* in relation to the *transfer request* pursuant to clause 4.3.2,

then, unless the *Market Participant* who delivered the *transfer request* to AEMO has also delivered to AEMO a *transfer withdrawal notice* in relation to the *transfer request* pursuant to clause 4.5.1, AEMO must as soon as is practicable, register the *Market Participant* who delivered the *transfer request* in the *metering register* as the *FRO* for the *supply point* to which that *transfer request* relates with effect from the *retrospective transfer date* to the *registration end date* (if any).

4.7.2 Registration Date

- (a) Where, pursuant to clause 4.7.1, AEMO registers the *Market Participant* who delivered the *transfer request* in the *metering register* as the *FRO* for a *supply point*, that registration will be deemed to take effect at 6.00am on the *retrospective transfer date* and will be deemed to cease to have effect at 6.00am on the day after the *registration end date* (if any).

- (b) AEMO must record the date on which such registration takes place, the date on which such registration is deemed to take effect and the period of registration in the *metering register*.

4.7.3 Termination of Retrospective Transfer

Where a notice has been delivered to AEMO by the *Distributor* in whose distribution area that distribution *supply point* is located, stating that the *proposed transfer date* nominated in the *transfer request* is invalid, then AEMO must:

- (a) cease processing that *transfer request*; and
- (b) upon cessation of processing the *transfer request*, by midnight on the next *business day*, deliver a notice that the *transfer request* has been terminated, to:
 - (i) the *Market Participant* who delivered the *transfer request* to AEMO;
 - (ii) the retrospectively affected *FRO* in relation to the *transfer request*;
 - (iii) the *Distributor* who owns the distribution network if the *supply point* to which the *transfer request* relates is a *distribution supply point* on that distribution network; and
 - (iv) the *transmission system Service Provider* with respect to that part of the *transmission system*, if the *supply point* to which the *transfer request* relates is a *transmission supply point* on that transmission network.

4.8 Registration notification

4.8.1 Notification by AEMO

Where, pursuant to clauses 4.6.1 or 4.7.1 (as the case may be), AEMO registers a *Market Participant* in the *metering register* as the *FRO* for a *supply point*, AEMO must, by midnight on the first *business day* after it registers that *Market Participant* in the *metering register* as the *FRO* for that *supply point*, deliver notice of that registration, together with the date from which that registration is deemed to take effect (*registration notice*) to:

- (a) that *Market Participant*;
- (b) where the *proposed transfer date* nominated in the *transfer request* is a *prospective transfer date*, the person who was the *FRO* for that *supply point* immediately prior to the registration of that *Market Participant* as the *FRO* for that *supply point*;

- (c) where the *proposed transfer date* nominated in the *transfer request* is a *retrospective transfer date*, the *retrospectively affected FRO* in relation to the *transfer request*;
- (d) if that *supply point* is a *distribution supply point* - the *Distributor* in whose *distribution area* that *distribution supply point* is located; and
- (e) if that *supply point* is a *transmission supply point* - the *transmission system Service Provider* with respect to that part of the *transmission system* on which the *transmission supply point* is located.

4.8.2 Registration Notice Information

A *registration notice* in relation to a *transfer request* must include the following information:

- (a) In relation to the *Distributor* and the *FRO* for that *supply point* immediately prior to the registration:
 - (i) MIRN for the supply point to which the transfer request relates;
 - (ii) the Market Participant who delivered the transfer request to AEMO;
- (b) In the notice to the *Market Participant* who delivered the *transfer request* to AEMO for that *supply point*.
 - (i) MIRN for the supply point to which the transfer request relates;
 - (ii) the FRO for that supply point immediately prior to the registration.

CHAPTER 5 – CUSTOMER DATA

5.1 Customer Data

Note: The purpose of this customer data is to support the provisions of chapter 6 only.

5.1.1 Creation, Maintenance and Administration

- (a) AEMO must create, maintain and administer a database to store customer details provided to AEMO under this clause 5.1.1.
- (b) Each *non-declared host Retailer* must update, format and deliver a new *complete customer listing* to AEMO by 5.00pm on the tenth *business day* after the end of the calendar month.
- (c) Within two *business days* of receipt of the *complete customer listing*, AEMO must:
 - (i) validate that:
 - (A) all mandatory fields as defined in the *complete customer listing* are populated;
 - (B) all *MIRNs* in the *complete customer listing* correspond with the *metering register* as to who the *FRO* is for the site as at the data extraction date;
 - (ii) store the *complete customer listing* in a secure database and archive previous versions of the *complete customer listing*;
 - (iii) where a *complete customer listing* fails validation, notify the relevant *non-declared host Retailer* of the validation failure.

CHAPTER 6 – RETAILER OF LAST RESORT

6.1 Retailer of Last Resort Event

6.1.1 Notice

This chapter 6 applies when AEMO issues a *suspension notice* to a *Retailer* in accordance with Part 19 of the Rules.

6.1.2 Cancelled and accelerated Customer Transfers

- (a) AEMO in relation to a lodged or pending *transfer request* must:
- (i) where the prospective *FRO* is the *failed Retailer*, cancel the *transfer request* and deliver a notice of the withdrawal of the *transfer request*, to the *FRO*, the prospective *FRO* and the *Distributor* for the *supply point* to which the *transfer request* relates before 6.00 am on the *RoLR gas day*. For the avoidance of doubt, AEMO will not further process that *transfer request*;
 - (ii) where the *MIRN*, that is subject to a *transfer request*, has the *failed Retailer* recorded as the *FRO* and the *transfer request* contains a *customer no-change statement*, accelerate the *transfer request* and deliver a notice of the registration of the *transfer request* to the prospective *FRO*, the *FRO* and the *Distributor* for the *supply point* to which the *transfer request* relates before 6am on the *RoLR gas day*; and
 - (iii) where the *MIRN*, that is subject to a *transfer request*, has the *failed Retailer* recorded as the *FRO* and does not contain a *customer no-change statement* and;
 - (A) if the *prospective transfer date* is ten days or less from the *RoLR gas day*, AEMO must accelerate the *transfer request* and deliver a notice of the registration of the *transfer request* to the prospective *FRO*, the *FRO* and the *Distributor* for the *supply point* to which the *transfer request* relates before 6am on the *RoLR gas day*; or
 - (B) if the *prospective transfer date* is more than ten days from the *RoLR gas day*, AEMO will allow the *transfer request* to be processed as normal and the *MIRN* relating to that *transfer request* will be included in the *metering register* update process described in clause 6.1.3.

6.1.3 Update Metering register that are not Subject to a Transfer Request

Before the *RoLR gas day*, for each *MIRN* for which the *failed Retailer* is recorded as the *FRO* and to which clause 6.1.2 does not apply, AEMO must amend the *metering register* by recording the *declared host Retailer* for the relevant *distribution area* as the *FRO*.

Note: By virtue of a licence condition included pursuant to section 51D of the *Gas Industry Act 2001 (Vic)*, *declared host Retailers* are Retailers of Last Resort in the case of the failure of another *Retailer*.

6.1.4 Data Exchange

Before the *RoLR gas day*, AEMO must:

- (a) provide each *declared host Retailer* a file containing customer details using the most recently received *complete customer listing* in accordance with the *Gas Interface Protocol*; and
- (b) provide each *Distributor* a file containing details of the *MIRNs* where in accordance with clause 6.1.3 AEMO has updated the *metering register* with the *declared host Retailer* as the *FRO* for each *distribution area*, deliver that file in accordance with the *Gas Interface Protocol*.

6.1.4A Update Distributor Database that are not Subject to a Transfer Request

Each *Distributor* must:

- (a) amend their database by recording the *declared host Retailer* as the *FRO* for each *MIRN* for which the *failed Retailer* is recorded as the *FRO* and to which clause 6.1.2 does not apply; and
- (b) provide AEMO with a report of the details of each *MIRN* that has been updated in the database.

6.1.5 Meter Reading and Account Creation

The *Distributor* must by the end of the fourth calendar day after the *RoLR gas day*.

- (a) undertake an *estimated meter reading* in accordance with an *approved estimation methodology* for all *MIRNs* contained within the file provided by AEMO in accordance with clause 6.1.4 (b) where the *MIRN* refers to a *basic meter*;
- (b) provide the meter reading information as described in clause 2.1.5 (a)(iii)(B) and the energy data information as described in clause

2.6.2(a) to the *failed Retailer* for all *MIRNs* contained within the file provided by AEMO in accordance with clause 6.1.4(b) where the *MIRN* refers to a *basic meter*;

- (c) provide the energy data information as described in clause 2.6.2 (b) to AEMO for all *MIRNs* contained within the file provided by AEMO in accordance with clause 6.1.4(b) where the *MIRN* refers to a *basic meter*; and
- (d) provide the current information set out in clause 3.1.1(a) to (m) and the information set out in clause 2.1.5(c)(i) to the *declared host Retailer* in the format specified in the *Gas Interface Protocol* for all *MIRNs* contained within the file provided by AEMO in accordance with clause 6.1.4(b). For the avoidance of doubt, in relation to clause 2.1.5(c)(i) the information may include the *estimated meter reading* referred to in clause 2.1.5(a)(iii) and is provided solely for the purposes of this chapter 6.

6.1.6 Updates to Estimated Meter Reading

Each *Distributor* must provide any updates to the estimated data provided under clause 6.1.5 (b), (c) and (d) to AEMO, the *failed Retailer* and *declared host Retailer*. The updates must be provided as soon as it is practical to do so, but in any event by the 118th *business day* after the end of the month in which the provisions of chapter 6 of these *Procedures* have been invoked.

6.1.7 Service Order Processes

Where a *Distributor* has not yet completed *service orders* that were initiated, prior to the *RoLR gas day*, by the *failed Retailer*, the *Distributor* by the end of the next calendar day after the *RoLR gas day* must provide a *service order in flight report* to the *declared host Retailer*.

6.1.8 Industry reconciliation program

Within the 50th *business day* after the *RoLR gas day* and after consulting with all affected *Market Participants* and *Distributors*, AEMO must determine if an industry reconciliation program is required.

Note: This clause places an obligation on AEMO to determine the need for a reconciliation of the customer transfers that have occurred during a RoLR event to ensure that *customers* have indeed been transferred to the correct Retailer of Last Resort and that the *Distributors'*, *Retailers'* and AEMO's databases are aligned. The intention is to perform an exercise that would identify and correct any errors. The 50 day period is to allow for at least one billing cycle to have occurred so that *Market Participants* can assess the financial implications of performing a reconciliation.

CHAPTER 7 – DISTRIBUTION UNACCOUNTED FOR GAS

7.1 Calculation of unaccounted for gas and determination of payments

7.1.1 Calculation

AEMO must calculate unaccounted for gas as between a *Market Participant* and *Distributor* and determine the payments to be made (and when they are to be made) in respect of unaccounted for gas, in accordance with the Distribution UAFG Procedures (as in force from time to time) made by AEMO under Part 19 of the Rules. The Distribution UAFG Procedures apply to AEMO's calculations and determinations under this clause with such adaptations and modifications as are required.

7.1.2 Benchmark Rates

In performing calculations and determining payments under clause 7.1.1, AEMO must use the applicable unaccounted for gas benchmark rates specified in the *Distribution Code* or another instrument that replaces the *Distribution Code* in relation to unaccounted for gas benchmark rates.

7.2 Publication of determination

AEMO must *publish* its calculations and determinations under clause 7.1.

7.3 Payment

Subject to any agreement to the contrary between a *Market Participant* and a *Distributor* payments are to be made in accordance with AEMO's determinations under clause 7.1.

7.4 Provision of information

For the purposes of its calculations and determinations under clause 7.1, a *Market Participant*, *Distributor* and relevant *transmission system service provider* must give to AEMO, as and when requested by AEMO, the information that AEMO requires to make a calculation and determination.

7.5 Exclusion

This Chapter 7 does not apply in any case where the provisions of Part 19 of the Rules dealing with calculation of unaccounted for gas as between a *Market Participant* and *Distributor* and determination of the payments to be made in respect of that unaccounted for gas, apply instead.



ATTACHMENT 1 – [Deleted]



ATTACHMENT 2 – [Deleted]

ATTACHMENT 3 – APPROVED VALIDATION METHODOLOGY

A *Distributor* must apply at least the following validation tests to a *meter reading*:

- (a) is the *meter reading* value numeric and greater than or equal to zero;
- (b) is the *meter reading* value greater than or equal to the previous *meter reading* value (other than where there has been a full revolution of the meter index (step-down value));
- (c) in respect of an *actual meter reading*, does the *meter reading* value pass the high/low test, as determined by AEMO and subsequently *published* by AEMO, conducted when the *meter reading* is undertaken;
- (d) is the date the *meter reading* occurred later than or the same as the date the immediately preceding *validated meter reading* occurred and;
- (e) does the meter reading value pass the Meter Capacity Test defined below:

Number of Dials	Meter Capacity per 60-day Billing Period
4	100GJ
5	500GJ
6	2,500GJ

ATTACHMENT 4 – APPROVED ESTIMATION METHODOLOGY

1. Application

A *Distributor* must undertake an *estimated meter reading* in the circumstances described in clauses 2.1.5(a)(ii), 2.1.5(a)(iii) and 2.4.2(b) of these *Procedures*.

2. Methodologies

2.1. Type 1 Estimation Methodology

2.1.1. A *Distributor* must use this estimation methodology where the *distribution supply point* in respect of which the *estimated meter reading* is to be undertaken has at least 12 months' consumption history.

2.1.2. A *Distributor* must utilise the calculated daily *base load* and the calculated usage per *effective degree day* for the relevant *distribution supply point* as follows:

- (a) The *Distributor* must estimate the consumed energy for a *basic meter* based on the weather measured in effective degree days and the base load and temperature sensitivity factor as follows:

$$\text{Consumed energy} = (\text{BL} \times \text{P}) + (\text{TSF} \times \Sigma\text{EDD})$$

Where:

- consumed energy is the estimated consumed energy over the reading period;
 - BL is the base load;
 - P is the number of days in the reading period;
 - TSF is the temperature sensitivity factor; and
 - ΣEDD is the sum of the effective degree days over the reading period.
- (b) The base load is derived from the smallest consumed energy measured in a reading period during the summer period (defined as between 1 October and 31 March within the current 12 month period) according to the following formula:

$$\text{BL} = \text{SE} / \text{PSE}$$

Where:

- BL is the *base load*;
- SE is the smallest *consumed energy* between two consecutive scheduled reads during the summer period; and
- PSE is the number of days in the *reading period* during the summer period.

(c) The *temperature sensitivity factor* applies a weather impact to the *base load* by reference to the *effective degree day* for each day in the *reading period*. The *temperature sensitivity factor* is derived from the difference between:

- (i) the largest *consumed energy* measured in a *reading period* during the winter period (between 1 April and 30 September within the current 12 month period); and
- (ii) the smallest *consumed energy* between two consecutive scheduled reads measured in a *reading period* during the summer period,

divided by the sum of the *effective degree days* for the *reading period* over which the largest *consumed energy* value was derived. This is represented by the following formula:

$$\text{TSF} = \max \{0, (LE - (BL \times PLE)) / \Sigma EDD (LE)\}$$

Where:

- TSF is the temperature sensitivity factor;
 - LE is largest consumed energy between two consecutive scheduled reads during the winter period;
 - BL is the base load;
 - PLE is the number of days in the reading period during the winter period; and
 - $\Sigma EDD (LE)$ is the sum of the effective degree days over the reading period during the winter period.
- (d) The *Distributor* must use the latest available *effective degree days published* by AEMO under clause 2.8.4(a) of these *Procedures*. Where the *effective degree day* for a *reading period* for a day is not available, the *Distributor* must use the *effective degree day* for the previous day.

2.2. Type 2 Estimation Methodology

2.2.1. A *Distributor* must use this estimation methodology where a *distribution supply point* in respect of which the *estimated meter reading* is to be undertaken has less than 12 months' consumption history.

2.2.2. A *Distributor* must use the four categories of *customers* in accordance with the *customer characterisation* provided to the *Distributor* pursuant to clauses 2.8.1(b) of these *Procedures* as follows:

	Melbourne metropolitan area	Non-Melbourne metropolitan area
Residential	R_1	R_2
Business	B_1	B_2

2.2.3. A *Distributor* must calculate the average *base load* and average *temperature sensitivity factor* for each *customer characterisation* as follows:

- (a) the average *base load* is:
 - (i) the sum of the *base load* consumption for all *customers* within that *Distributor's distribution area* which have that *customer characterisation* and 12 months or more consumption history; divided by
 - (ii) the number of *distribution supply points* within that *Distributor's distribution area* which have that *customer characterisation* and 12 months or more consumption history; and
- (b) the average *temperature sensitivity factor* is:
 - (i) the sum of *temperature sensitivity factors* for all *customers* within that *Distributor's distribution area* which have that *customer characterisation* and 12 months or more consumption history; divided by
 - (ii) the number of *distribution supply points* within that *Distributor's distribution area* which have that *customer characterisation* and 12 months or more consumption history.

2.2.4. A *Distributor* must determine the estimated usage for a *distribution supply point* by applying the relevant average *base load* and average *temperature sensitivity factor* (calculated pursuant to clause 2.2.3 of this Attachment) for that *distribution supply point* to each day occurring during the period to which the *estimated meter reading* relates. A *Distributor* must use the latest available *effective degree days published* by AEMO under clause 2.8.4(a) of these *Procedures*. Where the *effective degree day* for a *reading period* for a day is not available, the *Distributor* must use the *effective degree day* for the previous day.

2.2.5. A *Distributor* must apply the applicable average *heating value* and *pressure correction factors* to the estimated *consumed energy* to determine the estimated *flow* for the period and the relevant *estimated meter reading*.

2.3. Type 3 Estimation

2.3.1. Where neither a Type 1 nor Type 2 Estimate is appropriate, a *Retailer* and a *Distributor* may agree an estimated energy consumption for a *supply point* for a *reading period*.

ATTACHMENT 5 – APPROVED SUBSTITUTION METHODOLOGY

1. Application

A *Distributor* must undertake a *substituted meter reading* where:

- (a) a *basic meter* has failed or is shown to be defective; or
- (b) in other circumstances where there is no prospect of obtaining an *actual meter reading* or an accurate *actual meter reading* from that *meter*.

2. Methodologies

2.1. Type 1 Substitution Methodology

2.1.1. A *Distributor* must use this substitution methodology where the *distribution supply point* in respect of which the *substituted meter reading* is to be undertaken has at least 12 months' consumption history.

2.1.2. A *Distributor* must utilise the calculated daily *base load* and the calculated usage per *effective degree day* for the relevant *distribution supply point* as follows:

- (a) The *Distributor* must estimate the *consumed energy* for a *basic meter* based on the weather measured in *effective degree days* and the *base load* and *temperature sensitivity factor* as follows:

$$\text{Consumed energy} = (\text{BL} \times \text{P}) + (\text{TSF} \times \Sigma \text{EDD})$$

Where:

- *consumed energy* is the estimated *consumed energy* over the reading period;
 - BL is the base load;
 - P is the number of days in the reading period;
 - TSF is the temperature sensitivity factor; and
 - ΣEDD is the sum of the *effective degree days* over the reading period.
- (b) The *base load* is derived from the smallest *consumed energy* measured in a *reading period* during the summer period (defined as between 1 October and 31 March within the current 12 month period) according to the following formula:

$$\text{BL} = \text{SE} / \text{PSE}$$

Where:

- BL is the *base load*;

- SE is the smallest *consumed energy* between two consecutive scheduled reads during the summer period; and
 - PSE is the number of days in the *reading period* during the summer period.
- (c) The *temperature sensitivity factor* applies a weather impact to the *base load* by reference to the *effective degree day* for each day in the *reading period*. The *temperature sensitivity factor* is derived from the difference between:
- (i) the largest *consumed energy* measured in a *reading period* during the winter period (between 1 April and 30 September within the current 12 month period); and
 - (ii) the smallest *consumed energy* between two consecutive scheduled reads measured in a *reading period* during the summer period,

divided by the sum of the *effective degree days* for the *reading period* over which the largest *consumed energy* value was derived. This is represented by the following formula:

$$\text{TSF} = \max\{0, (\text{LE} - (\text{BL} \times \text{PLE})) / \sum \text{EDD} (\text{LE})\}$$

Where:

- TSF is the *temperature sensitivity factor*;
 - LE is largest *consumed energy* between two consecutive scheduled reads during the winter period;
 - BL is the *base load*;
 - PLE is the number of days in the *reading period* during the winter period; and
 - $\sum \text{EDD} (\text{LE})$ is the sum of the *effective degree days* over the *reading period* during the winter period.
- (d) The *Distributor* must use the latest available *effective degree days published* by AEMO under clause 2.8.4(a) of these *Procedures*. Where the *effective degree day* for a *reading period* for a day is not available, the *Distributor* must use the *effective degree day* for the previous day.

2.2. Type 2 Substitution Methodology

- 2.2.1. A *Distributor* must use this substitution methodology where the *distribution supply point* in respect of which the *substituted meter reading* is to be undertaken has less than 12 months' consumption history.

2.2.2. A *Distributor* must use the four categories of *customers* in accordance with the *customer characterisation* provided to the *Distributor* pursuant to clause 2.8.1(b) as follows:

	Melbourne metropolitan area	Non-Melbourne metropolitan area
Residential	R₁	R₂
Business	B₁	B₂

2.2.3. A *Distributor* must calculate the average base load and average temperature sensitivity factor for each customer characterisation as follows:

- (a) the average *base load* means:
 - (i) the sum of the *base load* consumption for all *customers* within that *Distributor's distribution area* which have that *customer characterisation* and 12 months or more consumption history; divided by
 - (ii) the number of *distribution supply points* within that *Distributor's distribution area* which have that *customer characterisation* and 12 months or more consumption history; and
- (b) the average *temperature sensitivity factor* means:
 - (i) the sum of *temperature sensitivity factors* for all *customers* within that *Distributor's distribution area* which have that *customer characterisation* and 12 months or more consumption history; divided by
 - (ii) the number of *distribution supply points* within that *Distributor's distribution area* which have that *customer characterisation* and 12 months or more consumption history.

2.2.4. A *Distributor* must determine the substituted usage for a *distribution supply point* by applying the relevant average *base load* and average *temperature sensitivity factor* (calculated pursuant to clause 2.2.3 of this Attachment) for that *distribution supply point* to each day occurring during the period to which the *substituted meter reading* relates. A *Distributor* must use the latest available *effective degree days published* by AEMO under clause 2.8.4(a) of these *Procedures*. Where the *effective degree day* for a *reading period* for a day is not available, the *Distributor* must use the *effective degree day* for the previous day.

2.2.5. A *Distributor* must apply the applicable *average heating value* and *pressure correction factor* to the substituted *consumed energy* to derive the substituted *flow* for the period and the relevant *substitute meter reading*.

2.3. Type 3 Substitution

2.3.1. Where neither a Type 1 nor Type 2 Substitute is appropriate, a *Retailer* and a *Distributor* may agree a substituted energy consumption for a *supply point* for a *reading period*.

ATTACHMENT 6 – NET SYSTEM PROFILE METHODOLOGY

1. Profile Preparation Service (PPS)

1.1. Calculation of the NSL

AEMO must calculate the net system load (**NSL**) for each *distribution area* in accordance with this clause 1.

For each *distribution area*, the **NSL** for each *gas day* is derived from the total energy entering the *distribution area* (**ET**) less the total energy leaving the *distribution area* (**EL**) and less the sum of all *interval metered* energy withdrawn at a *distribution supply point* within the *distribution area* (**EI**) adjusted for distribution unaccounted for gas within the *distribution area* (**UAFG_D**). The **NSL** for a *gas day* can be represented by the following formula:

$$NSL_{i,D} = ET_{i,D} - EL_{i,D} - \left(\frac{\sum EI_{i,D}}{(1 - UAFG_D)} \right)$$

Where:

- $NSL_{i,D}$ is the **NSL** for *distribution area D* for *gas day i*;
- $ET_{i,D}$ is the total energy entering *distribution area D* during *gas day i*;
- $EL_{i,D}$ is the total energy leaving *distribution area D* during *gas day i*;
- $EI_{i,D}$ is the *interval metered* energy withdrawn at a *distribution supply point* within *distribution area D* during *gas day i*; and
- $UAFG_D$ is the relevant value assigned to:
 - (a) the *Distributor* on whose distribution pipeline the *distribution supply point* is located; and
 - (b) the quantity of gas withdrawn by a *Market Participant* at the *distribution supply point*,

in accordance with Part C of Schedule 1 of the *Distribution Code*.

1.2. Updating the NSL

1.2.1. The **NSL** is subject to changes as a result of revisions to either *custody transfer meter* data or *interval meter* data. Revisions to *custody transfer meter* data are less likely than revisions to *interval meter* data because most *interval meters* are read manually more than three *business days* after the relevant *gas day* (when prudential reporting is required).

1.2.2. The data validation procedures made by AEMO under Part 19 of the Rules and those provisions of Part 19 that deal with validation and substitution of

metering data will be applied to estimate missing *interval meter* data. That data will be replaced with actual values when available.

AEMO must calculate the NSL for each *distribution area* for each *gas day* using revised or additional information provided or available to it in accordance with the following timeframe:

- (a) for prudential reporting – no later than three *business days* after the *gas day*;
- (b) for preliminary settlement – no later than seven *business days* after the end of the month in which the *gas day* occurred; and
- (c) for final settlement – no later than 18 *business days* after the end of the (c)month in which the *gas day* occurred.
- (d) for settlement revision – 118 *business days* after the end of the month in which the *gas day* occurred

2. Basic Meter Profiler (BMP)

2.1. Data for apportionment

The *consumed energy* data required by AEMO for the purpose of applying the NSL is provided to AEMO in accordance with clauses 2.6.2(b) and 2.6.3 of these *Procedures*. AEMO must apply the validation rules described in the *Consumed Energy Scenarios (Victoria)* to the *consumed energy* data delivered to AEMO by the *Distributors*.

2.2. Load Apportionment Using the NSL

2.2.1. AEMO must apply the NSL prepared in accordance with clause 1 to each *basic meter* for a *second tier supply point*, for which a *validated meter reading* is available, in accordance with this clause 2.2. The aim of applying the NSL is to apportion the *consumed energy* for each such *meter* to each *gas day* in the *reading period*.

2.2.2. The load apportionment factor is the ratio of the NSL for the relevant *gas day* to the total NSL for the corresponding *reading period* as represented by the following formula:

$$LAF_d = \frac{NSL_d}{\sum NSL}$$

Where:

- LAF_d is the load apportionment factor for *gas day* d;
- NSL_d is the NSL for *gas day* d; and
- $\sum NSL$ is the sum of the NSL for each *gas day* in the *reading period*.

2.2.3. The load apportionment factor for a *gas day* is applied to the *consumed energy* for a *reading period* for a *basic meter* to estimate the *consumed energy* for a *gas day* for that *basic meter* as follows:

$$\text{Consumed energy}_{d,j} = \text{accumulated consumed energy}_j \times \text{LAF}_d$$

Where:

- *consumed energy* is the *consumed energy* for *basic meter j* for a *second tier supply point* for *gas day d*;
- *accumulated consumed energy* is the *consumed energy* for the *reading period* for *basic meter j*; and
- LAF_d is the load apportionment factor for *gas day d*.

2.2.4. If a *validated meter reading* is not available, the *consumed energy* for a *basic meter* for a *second tier supply point* will be calculated in accordance with clause 2.3 of this Attachment.

2.3. Calculating Daily Load when Meter Readings are not available

2.3.1. Where a *meter reading* is not available, AEMO must estimate the *consumed energy* for a *basic meter* for a *second tier supply point* based on the weather measured in *effective degree days* and the *base load* and *temperature sensitivity factor* provided to AEMO by *Distributors* under clauses 2.8.1(c) and 2.8.1(d) of these *Procedures* as follows:

$$\text{Consumed energy}_{d,j} = \text{BL}_j + (\text{TSF}_j \times \text{EDD}_d)$$

Where:

- $\text{consumed energy}_{d,j}$ is the estimated *consumed energy* for *basic meter j* for a *second tier supply point* on *gas day d*;
- BL_j is the *base load* for *basic meter j*;
- TSF_j is the *temperature sensitivity factor* for *basic meter j*; and
- EDD_d is the *effective degree days* for *gas day d*.

2.3.2. When a *validated meter reading* for the *basic meter* becomes available, the *consumed energy* based on the *validated meter reading* will supersede the *consumed energy* estimated in accordance with this clause 2.3.

2.3.3. Where the sum of the allocated *consumed energy*, supplied by the *Distributors*, and the *generated consumed energy*, as calculated by AEMO, is greater than the *NSL* for a *gas day*, AEMO will proportionately scale down the *generated consumed energy* to no less than zero such that the addition of the *generated consumed energy* to the allocated *consumed energy* does not cause the total energy to be profiled to exceed the *NSL* for that *gas day*.

2.4. Timeframe for BMP Calculations

- 2.4.1. The majority of *meter readings* for *basic meters* will not be available three *business days* after the *gas day* and hence the estimation method specified in clause 2.3 of this Attachment must be used by AEMO to calculate *consumed energy* for each *gas day* for *basic meters* for *second tier supply points*.
- 2.4.2. AEMO must calculate the aggregate *consumed energy* for each *second tier supply point* for each *gas day* using revised or additional information provided or available to it in accordance with the following timeframes:
- (a) for prudential reporting – no later than three *business days* after the *gas day*;
 - (b) for preliminary settlement – no later than seven *business days* after the end of the month in which the *gas day* occurred;
 - (c) for final settlement – no later than 18 *business days* after the end of the month in which the *gas day* occurred; and
 - (d) for settlement revision – 118 *business days* after the end of the month in which the *gas day* occurred.
- 2.4.3. AEMO must use the most up to date *NSL* each time it performs the calculations referred to in clauses 2.2 and 2.4.2 of this Attachment.

2.5. Base Load & Temperature Sensitivity Factor

- 2.5.1. The *base load* is derived from the smallest *consumed energy* measured in a *reading period* during the summer period (defined as between 1 October and 31 March within the current 12 month period) according to the following formula:

$$BL = SE / PSE$$

Where:

- BL is the *base load*;
 - SE is the smallest *consumed energy* between two consecutive scheduled reads during the summer period; and
 - PSE is the number of days in the *reading period* during the summer period.
- 2.5.2. The *temperature sensitivity factor* applies a weather impact to the *base load* by reference to the *effective degree day* for each day in the *reading period*. The *temperature sensitivity factor* is derived from the difference between:
- (a) the largest *consumed energy* measured in a *reading period* during the winter period (between 1 April and 30 September within the current 12 month period); and

- (b) the smallest *consumed energy* between two consecutive scheduled reads measured in a *reading period* during the summer period,

divided by the sum of the *effective degree days* for the *reading period* over which the largest *consumed energy* value was derived. This is represented by the following formula:

$$\text{TSF} = \max\{0, (\text{LE} - (\text{BL} \times \text{PLE})) / \Sigma \text{EDD} (\text{LE})\}$$

Where:

- TSF is the temperature sensitivity factor;
- LE is largest consumed energy between two consecutive scheduled reads during the winter period;
- BL is the base load;
- PLE is the number of days in the reading period during the winter period; and
- $\Sigma \text{EDD} (\text{LE})$ is the sum of the effective degree days over the reading period during the winter period.

3. Effective Degree Days

3.1. Purpose of Effective Degree Day

Effective degree days are required for the calculation of the *temperature sensitivity factor*. The *effective degree day* is used to measure coldness which is directly related to gas demand for area heating. The *effective degree day* is a composite measure of weather coldness incorporating the effect of temperature, wind, sunshine and day of the year.

3.2. Calculation of Effective Degree Days

3.2.1. The *effective degree day* is calculated as follows:

$$\begin{aligned} \text{EDD} = & \text{DD (temperature effect)} \\ & + 0.038 \times \text{DD} \times \text{average wind (wind chill factor)} \\ & - 0.18 \times \text{sunshine hours (warming effect of sunshine)} \\ & + 2 \times \text{Cos} \left(\frac{2\pi (\text{day} - 200)}{365} \right) \text{ (seasonal factor)} \end{aligned}$$

Where:

- EDD is the *effective degree day*;
- DD is the degree day and is described in clause 3.2.2 of this Attachment;
- average wind is described in clause 3.2.3 of this Attachment;
- sunshine hours is described in clause 3.2.4 of this Attachment; and
- Cos is cosine and is described in clause 3.2.5 of this Attachment.

EDD will be 0 if the calculated value is negative.

3.2.2. The degree day is calculated as follows:

$$\text{DD} = \begin{cases} 18 - T & \text{if } T < 18 \\ 0 & \text{if } T \geq 18 \end{cases}$$

Where:

- DD is degree day;
- T is the average of 8 three-hourly Melbourne temperature readings (in degrees Celsius) from midnight to 9.00 pm inclusive as measured at the Weather Bureau Melbourne Station;

Note: The gas day is defined as 6:00am day-0 to 6:00am day+0 so the effective degree day formula implies a 6 hour lag in demand to changes in ambient temperature.

and

- 18 degrees Celsius represents the threshold temperature for residential gas heating.

The colder the average temperature the higher the degree day and, accordingly, *effective degree day*.

3.2.3. The average wind is the average of the 8 three-hourly Melbourne wind (measured in knots) from midnight (day-1) to 9.00pm inclusive (day+0) as measured at the Bureau of Meteorology Moorabbin and the Laverton weather stations. Average wind is represented by the following formula:

$$\text{Average wind} = 0.604 \times \text{average (Moorabbin, Laverton) wind}$$

3.2.4. Sunshine hours is the number of hours of sunshine above a standard intensity as measured at the Bureau of Meteorology Melbourne Airport weather station for the same duration of time between midnight (day-1) to 9.00 pm inclusive (day+0).

3.2.5. The cosine term models seasonality in *customers'* response to different weather. Residential consumers more readily turn on the heaters or leave heaters on in winter than in other seasons (early spring, late autumn) for the same change in weather conditions. This change in *customers'* behaviour is captured in the cosine term in the *effective degree day* formula, which implies that for the same weather conditions heating demand is higher in winter than in the shoulder seasons or in summer.