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1. INTRODUCTION

1.1 Purpose

The purpose of this document is to provide a baseline definition of CGI's scope of work for the delivery of the Gas Retail Market System (GRMS) for South Australia, in accordance with the [RMP].

The document is based on the [RMP] and expands on the [RMP] based on the resolutions agreed between AEMO and CGI.

This Business Specification is a deliverable under the Systems Operations Services Agreement between AEMO and CGI. The Business Specification is not binding on any persons other than AEMO and CGI.

The Business Specification [BS] is therefore, where possible, a copy of the Business Rules that are applicable to CGI's (GRMS) and processes, with necessary revisions to reflect the agreed resolutions.

Where references to the [SP] are included in this document, it refers to the latest version of that [SP].

1.2 Scope

To keep a consistent baseline for future change, the Business Specification will be kept aligned with the [RMP] and will be kept synchronised through the change control procedure.

1.3 Summary

Following this introductory section, each chapter in this document maps directly onto a [RMP] Chapter or Appendix.

1.4 Amendment History

Date	Issue	Change summary	Inits.
15/09/03	0.01	Final Draft Issued for Approval	KQ
24/09/03	0.02	Updated to include REMCo comments	JB
24/09/03	1.0	Issued for REMCo approval	JB
30/09/03	1.1	Issued definitive following incorporation of additional comments	JB
29/10/03	1.2	Updated to include changes to the RMR, up to and including version 2.0.	JB, TB, RS
10/11/03	1.3	Updated to include REMCo comments on v1.2	JB

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Date	Issue	Change summary	Inits.
11/11/03	1.4	Further updates to include REMCo comments	TB, RS
12/11/03	1.5	Further updates to include REMCo comments	JB, TB
19/11/03	1.6	Updated to include REMCo comments on v1.5	JB, MV
26/11/03	2.0	Updated definitive	JB
19/02/04	2.8	Updated to include CCN5 (sections 1-3, 6-10, Appendices). Includes the following Logica CRs: Logica CR05 Logica CR08	JB
19/02/04	2.8	Updated to include CCN5 (sections 4 & 5, Appendices)	MV
31/03/04	2.8	Updated to include CCN11 (sections 1-3, 6-10, Appendices). Includes the following Logica CRs: Logica CR09 Logica CR10 Logica CR16 Logica CR26 Logica CR35 Logica CR37 (except part 2) Logica CR38	JB
05/04/04	2.8	Modifications to section 101 for REMCo CR02 – changes to RMR v4.0b rule 101. (Supersedes Logica CR07)	JB
05/04/04	2.8	Following discussion with REMCo, updated section 104 such that ROLR transfer day is included in the NOT-ROLR transaction, and specified that the day can not be retrospective.	JB
22/04/04	2.8	Updated to include CCN11 (sections 4 & 5, Appendices)	MV
22/04/04	2.8	Removed references to Non-Automated Electronic File as per REMCo CR08 R289	IH
22/04/04	2.8	Added reference to acknowledge that elements of the Specification Pack will be obligated in CCN 10	IH
22/04/04	2.8	Added note in 1.1.7(2)(e) to say that any SA DST changes required will be defined post-go live	IH
22/04/04	2.8	Added note to section 1.3.5 stating that the GRMS will use standard email functionality, which may not meet the requirements defined in Rule 12(A)	IH
22/04/04	2.8	Updates for CR22	MV

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Date	Issue	Change summary	Inits.
07/05/04	2.9	Updates following REMCo Review	IH
07/05/04	2.9	Logica CR53: <ul style="list-style-type: none"> • Change PIPPROF to PIPPRF • Added reference to UAI-SUBS 	IH
09/05/04	2.9	Includes Logica CR42	IH
09/05/04	2.9	Logica CR43 – Added text into clause Error! Reference source not found.	IH
19/05/04	2.99	Added further comments in line with Dr Mark Fleming’s final BAR BS review	IH
01/06/04	3.0	Update to definitive and issued for approval	IH
29/10/04	3.1	Update to include: <ul style="list-style-type: none"> • CCN20 changes. • OR457. Change to section 53 (DSD transaction following Error Correction of Permanent Removal). • OR839. Change to section 133 (Addition of permanent removal cancellation.) • OR744. Change to section Error! Reference source not found. (HDD report to network operator). • OR773/ CCN22. Change to section Error! Reference source not found. (SRQ to swing service provider). • OR805/ CCN30. Change to section Error! Reference source not found. (Calculation of pipeline ration). • OR806/ CCN32. Change to sections Error! Reference source not found. and Error! Reference source not found. (Deemed Injection Quantities by User). • OR804/ CCN33 Change to section Error! Reference source not found. (Absolute value of UPNA for Swing Base Amount). • OR803/ CCN34 Change to section Error! Reference source not found. (User’s total (pre-procurement) swing service). 	JB

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Date	Issue	Change summary	Inits.
10/11/04	3.1	Updated to include OR868/ CCN38 change to section Error! Reference source not found. (NORM-NSL report to Network Operator).	JB
22/02/2005	3.1	Updated to include CCN31, section 32.	JB
24/02/2005	3.1	Updated to include CCN46, section 33.	JB
08/03/2005	3.2	Updated front page and version number – to keep in line with ICD (CCN43). Repaired formatting in section 5.	JB
01/08/2005	3.3	CCN55-Permanent Removal Requests	MV
03/08/2005	3.3	CCN54-Swing Service Price Caps	MV
03/08/2005	3.3	CCN56-Gas Emergency Procedures	MV
08/08/2005	3.3	CCN49-Recalculation of BAR Results	MV
11/10/2005	3.3	Remove changes for CCN54-Swing Service Price Caps	MV
14/10/2005	3.3	Remove changes for CCN56-Gas Emergency Procedures	MV
17/10/2005	3.3	Updated contract details & issued definitive	SJM
14/04/2006	3.4	CCN56-Emergency Gas Procedures	DT
14/04/2006	3.4	CCN58-ROLR Provisions (WA)	DT
14/04/2006	3.4	CCN59-RUAFG & Negative NSL	DT
14/04/2006	3.4	CCN61-MRFC Pipeline	DT
14/04/2006	3.4	CCN62-Calculation of AUAFG	DT
27/09/2006	3.4	CCN64-Additional AUAFGData	DT
27/09/2006	3.4	CCN65-HDD Greater or Equal to Zero	DT
27/09/2006	3.4	CCN66-Historical UETW	DT
13/11/2007	3.4	CCN75-Automation of BAR Recalculation process Updated 1.1.2, definition of “affected gas day” [RMR 2]; and 4.3.2 (1) (b) [RMR 152(3)]; and 4.3.2 (2) [RMR 152(3)]; and 5.24 [RMR 301B]; and 5.25 [RMR 301C]; and 5.26.1 (1) [RMR 301(2)]	GH
25/02/2010	4.0	Update document for AEMO and for the impact of the SA Market (Adelaide Hub) entry into STTM	RG
19/05/2011	4.0	CR103 – Update Clause 246(1) CR104 – Update Clause 67 and Clause 83 New clause 14A for amending the [SP] and FRC Hub conditions	RG
27/03/2013	4.1	CR114 – Added Chapter 11 – Retailer of Last Resort	AR

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Date	Issue	Change summary	Inits.
14-09-2015	4.2	CR117 – Chapter 11RoLR update Updated Section 1.6 References CR119 – FRO in TFR-REQ Notifications – Updated clause 102	AR
29-06-2018	4.3	CR141(SA) Removal of Intra-Day Reports (IN011/17) Clauses 213-217 removed. GPENG, GPENGPROF and ECA reports completely removed. UPF, NPF and PPF reports no longer generated under intra-day reports.	RG
1-10-2019	4.4	Gas Day Harmonisation Project. Start of Gas Day moved to 06:00 AEST Impacted: Sections, 2 Definitions, 3 Interpretation, 6A Time under these Procedures. 14A, 14B and 14C	RG

1.5 Change Forecast

The content of this document will be kept up-to-date upon each contractual change notice approved by AEMO.

1.6 References

Mnemonic	Document	Source	Issue	Date
[RMP]	Retail Market Procedures	AEMO	TBA	01/10/2019
[ICD]	Interface Control Document	CGI	V4.8	29/6/2018
[BS]	Business Specification (this document)	CGI	V4.4	01/10/2019
[SOSA]	Systems Operations Services Agreement	AEMO / CGI	N/A	July 2017
[SP]	Specification Pack [SP]	AEMO/ CGI		
[MIBB]	FRC B2B System Interface Definitions	AEMO	3.6	01/02/2013

1.7 Abbreviations

Abbreviations are fully expanded at their first place of inclusion in the document, and are referenced by the abbreviation thereafter.

1.8 Glossary

In this document the clause numbering and clause headings have been maintained to align with the clause numbering in the [RMP].

In the [RMP], there are many activities identified as being performed by the ‘Market Operator’. In order to clearly identify the party responsible for performing various actions at a functional level and hence the scope of the GRMS automated system, the following terms have been adopted. These defined terms are used throughout this document and are additional to the definitions set out in clause 2, of the main body of this document:

Business Specification Reference	Description
<i>Market Operator</i>	AEMO, or its nominated representatives.
<i>the GRMS operations staff</i>	The CGI Market Operations staff
<i>AEMO</i>	The Retail Market Operator (may be AEMO or a body appointed by AEMO).
<i>the data estimation entity</i>	The GRMS automated subsystem responsible for handling the BAR functionality.
<i>AEMO</i>	The GRMS automated subsystem responsible for handling the Customer Transfer and MIRN Registry functionality.
<i>Market Operator Initiating Receipt Id</i>	A unique identifier provided in response to a transaction which initiates a business process within the GRMS (e.g. Initiation of Change of User). The <i>Receipt Id</i> is used as the identifier for that particular instance of the business process in all subsequent transactions in the business process by both the GRMS and <i>participants</i> .

Where there is an interface into or out of the system, it has been explicitly classified as one of the following:

Type of Dataflow	Description
<i>AseXML</i>	An automated AseXML transaction, routed via the Hub
<i>bulk electronic file</i>	A file which has a defined structure, which can be automatically processed, but does not have AseXML wrapping. This file has a non-specific method of transport.
<i>automated electronic file</i>	A file which has a defined structure, which can be automatically processed, but does not have AseXML wrapping. This file type will be transferred using ftp, as defined in the [ICD].

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<i>notice</i>	An unstructured instruction, such as fax, email etc.
<i>acknowledgement</i>	Dependent upon the method of transport for the initiating transaction, the acknowledgement of that transaction will be one of the following: <ul style="list-style-type: none">• An AseXML transaction acknowledgement, as defined in the AseXML guidelines document• An ftp response, as defined in the [ICD]

Where one of the above dataflow types is implied in the text of this Business Specification, it is preceded or succeeded by the text "by means of a ...".

A cross reference is then made to the [ICD]. This defines the context, logical data items and physical data mappings.

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1. Introduction

Part 1.1 Commencement, definitions and Interpretation

1 Commencement

The [RMP] commence:

- a) — on the *go-live date* in South Australia.

2 Definitions

In this document, unless the contrary intention appears:

“**Access Arrangement**” means an access arrangement made by:

ESCOSA under the old access law and gas code: or

By the AER under the National Gas Law [NGL] and the National Gas Rules [NGR];

“**accurate**” includes complete, correct and current (where applicable, subject to the time frames for updating the *registry* and *network operators’* databases under this document).

“**active GBO identification**” means the status of the *GBO identification* in the AEMO Registry is neither “suspended” or “deregistered”.

“**active in the market**” has the meaning given to it under clause 377B(1).

“**actual heating degree day**” is calculated under clause 177.

“**actual UAFG**” has the meaning given to it under clause 230(1)

“**actual value**” means, subject to clause 157(2), a value calculated under clause 155 , and to avoid doubt includes a *deemed actual value*.

{Note: A *substituted value* may be used in place of an *actual value*.}

{Note: For a *basic-metered delivery point*, an *actual value* may be calculated after undertaking either a *scheduled meter reading* or a *special meter reading* and also for the purposes of a *deemed meter reading*.}

“**addressee**” has the meaning given to it in clause 12A(1).

“**adjusted hourly sub-network profiled forecast**” has the meaning given to it in clause 215(3)(c)

“**adjusted hourly user profiled forecast**”, , means a forecast determined under clause 215(3)(b).

“**adjusted non-user specific amount**” has the meaning given to it under clause 272.

“**adjusted recalculated pipeline profiled forecast**”, , means a forecast determined under clause 216(1)(b).

“**adjusted socialised amount**”, , has the meaning given to it under clause 271.

“AEMO information system” means AEMO’s equipment, hardware and software (including the AEMO registry) of AEMO used to perform its obligations under these Procedures.

“AEMO registry” means the database maintained by AEMO under clause 19(1), containing at least the AEMO standing data and the information referred to in clause 22(4).

“AEMO Specification Pack” means the suite of documents, as approved by AEMO, to support the operation of these Procedures.

“AEMO standing data”, in relation to a delivery point, means the information set out in clause 20(1) for the delivery point.

“affected gas day”:

when used in clause 301A, means the gas day on which *AEMO* sends notice under 301A(3)(a); and

when used in clause 301B, has the meaning given to it in clause 301B(1); and

when used in 301C, has the meaning given to it in clause 301C(1).

allocation instruction” means a notice under clause 188**Error! Reference source not found.** from a *user* to *AEMO* specifying how the *user’s injections* into a *sub-network* are to be allocated between the *shippers injecting* gas into the *sub-network* on the *user’s* behalf for a *gas day*.

“allocation instruction percentage”, , means the amount calculated under clause 206.

“allowable period” means the period of 102 days after the lodgement of a *transfer request* under clause 80.

“appointor” has the meaning given to it under clause 228(2).

“as-retrieved” means data as retrieved from field equipment by telemetry without any examination of the data to determine the validity or completeness of the data or whether there are any obvious errors or omissions in the data.

“associated persons” has the meaning given to it under clause 376.

“auditor” means an auditor appointed under section **Error! Reference source not found.**.2.

“automated response message” means an email (**“reply email”**) sent automatically, subject to clause 12A Notices by email, upon receipt of an email (**“original email”**), where the *reply email* is sent from an *addressee’s information system* to the *sender* of the *original email*, acknowledging that the *original email* has been received by the *addressee’s information system* and containing:

(a) the name of the *originator* of the *original email*;

(b) at least the time, date and subject title of the *original email*;

{Note: The easiest means to record this information may be to include the whole of the *original email*, preferably excluding attachments, within the *reply email*.}

(c) the name of the *addressee* of the *original email*; and

(d) the date and time the *original email* was received by the *addressee's information system* (which in the absence of evidence to the contrary is taken to be the creation date of the *reply email*)

Note that the *Market Operator's information system* does not support 'automated response messages'

“**average temperature**” is calculated under clause 177(5)(e).

“**basic meter**” means a *meter* which is not an *interval meter*.

“**basic metered**”, in relation to a *delivery point*, means that gas deliveries at the *delivery point* are measured by a *basic meter* or *basic meters*.

“**bulk AEMO standing data**” has the meaning given to it in clause 23(1).

“**bulk AEMO standing data request**” has the meaning given to it in clause 23(2).

“**business day**” means for each *jurisdiction* and for AEMO operating in each *jurisdiction*, the *business hours* of a day that is not a Saturday, Sunday or a public holiday in the relevant *jurisdiction*.

“**business hours**” means the period between *start of business* and *close of business*.

“**cancel**”, in relation to a *transaction*, means terminate the *transaction* before completion.

“**claim**” includes any claim, legal action or demand.

“**clause 192(2) notice**” has the meaning given to it in clause 192(2).

“**close of business**” means 1700 hours in the relevant *jurisdiction*.

“**commissioned**”, in relation to a *MIRN*, means that:

(a) the *delivery point* has been commissioned by the *network operator* under clause 3(1)(although this does not necessarily mean that the consumer's installation downstream of the *meter* is commissioned nor that the *meter valve* is turned on); and

(b) the *delivery point* is not *disconnected* or *permanently removed* (including after the *delivery point* has been *reconnected*); and

includes:

(c) if the *delivery point's ability to flow gas* has been temporarily interrupted by a means that may be restored by the consumer, rather than a licensed gas fitter or *network operator* (i.e. where the *meter valve* has merely been switched off); and

(d) short interruptions to the *delivery point's ability to flow gas* due to *network maintenance* such as a *meter change*.

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

“confidential information” means confidential and proprietary information of a *participant, pipeline operator or prescribed person*, that:

(a) is or might reasonably be expected to be confidential in nature or to be special, unique, proprietary or to give the person a competitive advantage; or

(b) is disclosed in circumstances of confidentiality.

“corrected pipeline profiled forecast”, , means the corrected forecast under clause 216 (1)(c).

“corrected sub-network profiled forecast”, , means the corrected forecast under clause 216(1)(c).

“corrected volume or “V_{CR}” means the volume of gas corrected to metric standard conditions and for the *basic meters* it is calculated using the following formula:

$$V_{CR} = V_{UN} \times \text{pressure correction factor.}$$

“cost” includes any cost, charge, expense, outgoing, payment or other expenditure of any nature whatever,

“current user”, in relation to a *delivery point*, means the *user* who is assigned to the *delivery point* in the AEMO Registry.

“customer” means a *person* who takes or intends to take gas from a *user* at a *delivery point*.

“data change notice” means a notice under clause 27(3) by the network operator to AEMO regarding a change, or anticipated change, to items 20(1)(f), 20(1)(g), 20(1)(h), 20(1)(k) or 20(1)(l) of the AEMO standing data for a *delivery point*.

“data change transaction” means the transaction initiated by lodgement of a *data change notice*

“decommissioned”, in relation to a *MIRN*, means that the *delivery point* has been *disconnected*.

“deemed actual value” means the *actual value* contained in a *deemed meter reading*.

“deemed meter reading” is defined in clause 148.

“delisting request” means a request under clause 173(2)(b) by a *shipper* or a *swing service provider* to AEMO to remove the *shipper’s* or *swing service provider’s* listing from a *shipper register* in respect of a *user* and a *sub-network* from a specified *effective date*.

“delivery point” means a point defined in a *haulage contract* as the point on the *sub-network* at which a *network operator* delivers gas out of the *sub-network* to a *user*.

“delivery point identifier”, for the purposes of the *Market Operator Constitution*, has the same meaning as *MIRN* in these Procedures.

“delivery point transaction”, in relation to a *delivery point*, means any or all of a *new connection confirmation notice*, a *permanent removal confirmation notice* and a *transfer*.

“deregistered”, in relation to a *MIRN*, means that the *delivery point* has been *permanently removed*.

{Note: When a *MIRN* is *deregistered*, subject to Division 2.2.3, the process is irreversible, see clause 133(2). Except if a valid *error correction notice* has been accepted by AEMO under clause 35(a) in respect of an incorrect *permanent removal confirmation notice*, a *deregistered MIRN* may never be allocated another *MIRN status*, may never be *transferred*, and takes no part in calculations or allocations under CHAPTER 5. If supply is recommenced at the supply address, a new *MIRN* will be issued.}

“disconnected”, in relation to a *delivery point*, means that the *delivery point’s* ability to flow gas has been temporarily interrupted in such a manner that gas flow may not lawfully be restored by the *customer*.

{Note: This means, for example, that either the regulator has been removed, the meter has been temporarily removed or the *meter valve* has been locked by the *network operator*. The *user* remains responsible for the *delivery point*.}

“disconnection confirmation notice” means a notice under clause 112 from a *network operator* to AEMO advising AEMO that a *delivery point* has been *disconnected*.

“disconnection notice” means a notice under clause 105(3) from a *user* to a *network operator* requesting *disconnection* of a *delivery point* specified in the notice.

“disconnection withdrawal notice”, means a notice under clause 108(2) from a *user* to a *network operator* withdrawing an *open disconnection notice* for a *delivery point* specified in the *disconnection withdrawal notice*.

“discovery address”, in relation to a *delivery point*, means the address of the premises comprising (as applicable):

- (a) flat/unit type; and
- (b) flat/unit number; and
- (c) floor level type; and
- (d) floor level number; and
- (e) building/property name; and
- (f) location; and
- (g) house number; and
- (h) house number suffix; and
- (i) lot number; and
- (j) lot number suffix; and
- (k) street name; and
- (l) street type code; and
- (m) street suffix; and
- (n) suburb/place/locality; and
- (o) *State/Territory*; and
- (p) post code.

“**dispute**” includes any difference, dispute, matter, question, controversy, *claim* or legal action in connection with or arising out of clauses within this document.

“**distributed actual basic-metered withdrawal**”, or “**DABW**”, for a *basic-metered delivery point*, is determined under clause 227A.

“**distribution licence**” means:

(a) — a licence that authorises the licence holder to operate a distribution system under section 19(a) of the *Gas Act 1997* (SA).

“**distribution tariff code**”, for a *delivery point*, means a code determined by a *network operator* as a *reasonable and prudent person* and published in accordance with clause 6, which provides information concerning the applicable haulage tariff and the existence of *delivery point*-specific charges under the *user’s haulage* contract in respect of the *delivery point*.

“**dog code**” refers to a list of codes contained in the “FRC B2B Systems Interface Definitions” in the *[SP]*.

“**earlier allocation instruction**” has the meaning given to it in clause 192(2) for a gas day.

“**earliest transfer day**” means the date specified in a *transfer request* as the earliest day on which the *requested transfer* may take place, which for a *move in* would be the date the *customer* is moving into the premises.

“**EDD**” means effective degree day.

“**E_(D)**” is calculated under clause 177(5)(a).

“**E_(D-1)**” is calculated under clause 177(5)(b).

.

“**E_(D-2)**” is calculated under clause 177(5)(c).

“**E_(D-3)**” is calculated under clause 177(5)(d).

“**effective date**”, as used in clause 173 and associated definitions, has the meaning given to it by that clause.

“**electronic form**” means a structured electronic file that is capable of being downloaded.

“**EMD sub-network**” means any sub-network other than:

(a) a farm tap sub-network;

(b) an uncovered sub-network; or

(c) a sub-network that is connected to a single pipeline. {Note: Currently, only the Adelaide metro sub-network (the sub-network identified by the code 2101 in accordance with Sub Appendix 1.2) is an EMD sub-network.}

“**energy value**” means an *actual value*, a *deemed actual value*, an *estimated value* or a *substituted value*, as applicable.

“**energy value type**” means one of the four types of an *energy value*, namely *actual value*, *deemed actual value*, *estimated value* or *substituted value*, as applicable..

“**error correction notice**” means a notice under clause 32(6) to AEMO regarding a correction to the AEMO *standing data* for a *delivery point* as a result of an incorrect *delivery point transaction*.

“**error correction objection**” means a notice under clause 32(6) from a *participant* to AEMO objecting to an *error correction transaction* lodged in respect of an incorrect *transfer request*, for a *delivery point* specified in the notice.

“**error correction objection resolution period**” means (as applicable):

(a) if an *error correction objection* is not lodged under clause 36(1) — the period ending when the time allowed for lodging an *error correction objection* under clause 2(1) expires; or

(b) if an *error correction objection* is lodged under clause 36(1) — the period ending when the time allowed for lodging an *error correction objection withdrawal notice* under clause 36 expires.

“**error correction objection withdrawal notice**” means a notice under clause 39(2) from a *participant* to AEMO withdrawing an *open error correction objection* for a *delivery point* specified in the notice.

“**error correction transaction**” means the *transaction* initiated by lodgement of an *error correction notice*.

“**error correction withdrawal notice**” means a notice under clause 43(3) from a *current user* to AEMO withdrawing an *open error correction notice* lodged in respect of an incorrect *transfer request*, for a *delivery point* specified in the notice.

“**ESCOSA**” has the same meaning as “**Commission**” has under the *Gas Act 1997* (SA).

{Note: At the time these *Procedures* commenced, —**Commission** means —the Essential Services Commission established under the *Essential Services Commission Act 2002*l.}

“**estimated basic-metered withdrawal**” for a *basic-metered delivery point* is calculated under clause 226.

“**estimated consumption amount**”, , is the amount calculated under clause 215(3).

“**estimated value**” means a value calculated under clause 156, and (except in clause 157) does not include an *estimated value* which has been designated under clause 157 to be a *substituted value*.

“**EUAFG**” means estimate of unaccounted for gas under clause 229.

“**exit the market**” has the meaning given to it under clause 377B(1).

“**explicit informed consent**” means consent given by a *customer* under clause 349.

“**farm tap sub-network**” means a *delivery point* which is connected to only one *pipeline* and is not connected by a *GDS* or part of a *GDS* to any other *delivery point*, which a *network operator* identifies under clause 15 as a *sub-network* for contractual and operational purposes and which is listed in Appendix 1 .

“**flow profile control**” in relation to a gate point means a control system designed to control the gate point flow rate such that the gate point discharge pressure is limited to the maximum allowable operating pressure of the sub-network.

“**flow ratio control**” in relation to a gate point means a control system designed to control the gate point flow rate such that:

within normal equipment tolerances, the gate point flow rate is maintained at a pre-determined ratio to the flow rate of all other gate points connected to the sub-network; and

the gate point discharge pressure is limited to the maximum allowable operating pressure of the sub-network.

“**flow signal**” has the meaning given to it in 217A

“**force majeure event**” in relation to any person, means any act beyond the reasonable control of that person which prevents, hinders or delays that person from or in the performance of any obligation of that person under any agreement but excluding any acts resulting from any action or omission or default of that person or any agent of that person.

“**forecast basic-metered withdrawals**” or “**UFBW**”, in relation to a user, means the forecast withdrawals for the *user’s basic-metered delivery points* in a *sub-network* for a *gas day*, in megajoules, calculated by AEMO under clause 204(1)(a).

“**forecast EDD**” is calculated under clause 177.

“**forecast heating degree day**” is calculated under clause 177.

“**forecast interval-metered withdrawals**” or “**UFIW**”, in relation to a user, means the forecast withdrawals for the user’s interval-metered delivery points in a sub-network for a gas day, in megajoules, provided to AEMO by the user under clause 202(1)(b).

“**FRC Hub**” means the *information system* provided by AEMO for the transmission of AseXML messages under these Procedures.

“**FRC Hub certification criteria**” means the criteria specified in the *FRC Hub Conditions*.

“**FRC Hub certification testing process**” means the testing process set out in the *FRC Hub Conditions* to ensure that a person’s *information system* complies with the requirements of the *FRC Hub Conditions*.

“**FRC Hub compliance certificate**” means a digital certificate issued by AEMO certifying that the person named in the certificate is entitled to send and receive *notices* under the [RMP] via the *FRC Hub*.

“**FRC Hub Conditions**” means the terms and conditions that apply between AEMO and any business that sends or receives transactions via the *FRC Hub*, as amended from time to time under the [RMP].

“**FUAFG**”, means the *network operator’s* forecast of unaccounted for gas under clause 201.

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“full business day” means a full 9 hour period commencing at *start of business* and ending at *close of business*.

{Examples: If an objection must be lodged within 2 *full business days* after a *process time*, then:

(a) if the *process time* is 7.59am on Tuesday, the objection must be lodged before 5.00pm on Wednesday; and

(b) if the *process time* is 8.01am on Tuesday, the objection must be lodged before 5.00pm on Thursday; and

(c) if the *process time* is 11.00am on Friday, the objection must be lodged before 5.00pm on Tuesday; and

(d) if the *process time* is 11:00pm on Tuesday, the objection must be lodged before 5:00pm on Thursday.}

“gas” has the meaning given to the term "natural gas" in the National Gas Law.

“gas day” means a period of 24 consecutive hours starting at the same time as the standard gas day as defined in Part 26 of the National Gas Rules.

“gas day D” has the meaning given to it in clause 3(3).

“gas emergency” means a disruption to normal gas supply to a *sub-network* that commences when:

when the Minister with administrative responsibility for the Gas Act 1997 (SA) issues directions requiring a participant to curtail the supply of gas to one or more customers within the sub-network; or

when AEMO receives written notice from at least one shipper that a force majeure event is likely to cause, or has caused, a shortfall in deliveries for shippers at a gate point for the sub-network, and AEMO is satisfied that the shortfall in deliveries for all shippers at the gate point is likely to exceed 10% of the sum of all users' required withdrawals for the sub-network;

“gas installation” has the same meaning as it has under the *Gas Act 1997 (SA)*.

{Note: At the time these *Procedures* commenced, that definition was —...means fixed pipes and any fixed *gas* appliances, and associated equipment (including flues), installed in a place for the conveyance, control, measurement or use of *gas* that is, is to be, or has been, supplied (whether by a distribution system or pressurised vessel) for consumption in the place, but does not include *gas* infrastructure.}

“gas zone” means a part of a *GDS* which a *network operator* identifies under clause 15 as a gas zone for contractual and operational purposes.

“gas zone code” means the 5-digit numeric gas code assigned to each *gas zone* within a *GDS* under Appendix 1 .

“gate point” for a *sub-network* means a point (which may be the same location as a *physical gate point*), which is designated as the gate point under clause 174 for the *sub-network*.

“gate point metering data” has the meaning given to it under clause 152(1)(a).

“**GBO identification**” means the unique gas business operator identifier issued by *AEMO* under clause 22 to *AEMO* and to each person required to comply with the [RMP].

“**GDS**” means the gas distribution system, being those pipelines owned and operated by a *network operator*.

“**go-live date**” means:the date on which the relevant provisions of Part 2 of the *Gas Act 1997(SA)* come into operation or such later date as the South Australian *Market Operator members* and *AEMO* unanimously agree.

“**GST**” has the same meaning as it has under the *A New Tax System (Goods and Services Tax) Act 1999 (Cth)*.

“**haulage contract**” means a contract between a *network operator* and a *user* for the transportation of gas through the *network operator’s GDS*, and for the purposes of clause 86(1), also mean that:

- (a) any condition precedent to the contract has been satisfied or waived; and
- (b) no notice to validly terminate the contract has been issued by a party to the contract to the other party.

“**HDD zone**” means a positive HDD zone or a negative HDD zone.

“**heating degree day**” is calculated under clause 177.

“**heating value**”:

(a) — means as determined by the Technical Regulator (as established under the *Electricity Act 1996 (SA)* and the *Gas Act 1997 (SA)*) and notified to *participants* from time to time.

“**heating value data**” means the *heating value* for a *gas zone* for a *gas day* that is calculated under clause **Error! Reference source not found.**

“**historical gas day i**” has the meaning given to it under clause 218(3).

“**historical metering data**” means the *metering data* for every *delivery point* in a *network operator’s GDS* retained in accordance with clause 168.

“**historical meter reading data**”, in relation to a *delivery point*, means the *meter reading data* for the *delivery point* retained under clause 168.

“**historical AEMO standing data**”, in relation to a *delivery point*, means the *AEMO standing data* for the *delivery point* retained by *AEMO* under clause 54.

“**historical AEMO standing data request**” means a notice under clause 2(4) from a *user* or a *network operator* to *AEMO* requesting *historical AEMO standing data* for a *delivery point* specified in the request.

“**historical UAFG day**” has the meaning given to it in clause 230.

“**hourly IM energy**”, has the meaning given to it in clause 215(3)(a).

“**hourly sub-network profiled forecast**”, in clause 215(3)(c) means the component for the hour of the *sub-network profiled forecast*.

“**hourly user profiled forecast**”, has the meaning given to it in clause 215.

“**H_{sun}**” has the meaning given to it in clause 177(3)(c).

“**in-progress Procedure change**” means a proposal to make Procedures under section 135ED of the [NGR] that:

has not been rejected by AEMO under section 135ED of the [NGR]; and

has not come into effect in accordance with Part 15B of the [NGR].

“**immediately**”, in relation to a notice, is defined in clause 11(1).

“**inaccurate**” means not *accurate*.

“**incoming user**” means a *user* or prospective *user* who wishes to withdraw gas at a *delivery point* where another *user* is the *current user*.

“**indemnifier**” has the meaning given to it in clause 366.

“**indemnifying party**” has the meaning given to it under clause 377A(1).

“**index reading**” means the numerical reading of a *meter* index, which represents uncorrected volume, as observed by the *meter* reader when physically undertaking a *meter reading*.

“**index type**” means an indicator showing whether a *meter* reads in metric or imperial units.

“**indirect damage**” suffered by a person means:

(a) any consequential loss or damage however caused, including any:

(i) loss of (or loss of anticipated) use, production, revenue, income, profits, business and savings; or

(ii) loss or damage due to business interruption,

whether or not the consequential loss or damage was foreseeable; and

(b) any liability of the person to any other person, or any claim, demand, action or proceeding brought against the person by any other person, and any costs or expenses in connection with the claim, demand, action or proceeding.

“**Industry Ombudsman**” has the meaning given to —Industry Ombudsman in the relevant ESCOSA codes.

“**information system**” means equipment, hardware and software of a person required to comply with these Procedures which is used to perform the person’s obligations under these Procedures.

“**injecting**” means the process of delivering gas out of a *pipeline*, through a *gate point* and into a *sub-network*.

“**instantaneous flow rate**” has the meaning given to it in clause 217A.

“**interested person**” means, in relation to a matter:

a government representative in South Australia; or

any other person that ESCOSA considers has a legitimate interest in the matter or should be consulted in relation to the matter.

“**interval meter**” means a *meter* which:

- (a) is read by means of *telemetry*; and
- (b) aggregates the flow of gas across time, and records that flow for each hour.

“**interval-meter demand profile**” for South Australia, is provided under clause **Error! Reference source not found.** and comprises 24 numbers which sum to 1 and are the *user’s* estimate, for each hour in the *gas day*, of the proportion of its *forecast interval-metered withdrawals* for the which will be withdrawn during the hour.

“**interval metered**”, in relation to a *delivery point*, means that gas deliveries at the *delivery point* are measured by an *interval meter*.

“**last date of modification**”, for a *delivery point*, means the date the last update to any item of *Market Operator standing data* became effective in the AEMO Registry.

“**last valid day**” has the meaning given to it in clause 223 **Error! Reference source not found.**

“**law**” means all:

written and unwritten laws of the Commonwealth, of South Australia and of any other State, Territory or foreign country having jurisdiction over the subject matter of these Procedures; and

judgments, determinations, decisions, rulings, directions, notices, regulations, by-laws, statutory instruments, Codes of Practice, Australian Standards or orders given or made under any of those laws or by any government agency or authority.

“**like day substitution methodology**” has the meaning given to that term in 0.

“**listing request**” means a request by a *shipper* or a *swing service provider* to AEMO to list it in the *shipper register* in respect of a *user* and a *sub-network* from a specified *effective date*.

“**maintain**” includes (as necessary and as applicable) calibrate, test, verify renew, replace or update.

“**Market Operator**” means the Australian Energy Market Operator.

“**Market Operator information system**” means AEMO’s equipment, hardware and software (including the AEMO Registry) of *Market Operators* used to perform its obligations under these Procedures.

“**Market Operator Constitution**” means the constitution governing *Market Operators*.

“**Market Operator member**” means a person for the time admitted to membership of *Market Operators* under the *Market Operator Constitution*.

“**market responsive flow control**” in relation to a gate point means a control system designed to control the gate point flow rate such that:

within normal equipment tolerances, by following the *pipeline profiled forecast* for that *gate point* determined by AEMO under clause 207; and

The *gate point* discharge pressure is limited to the maximum allowable operating pressure of the *sub-network*.

“**market responsive flow control pipeline**” means a *pipeline* for which it is intended that the *injections* of gas on a day follow a *pipeline profile forecast* provided by a third party.

“**market share**”, with respect to a *user*, who is a *Market Operator member*, at a particular time, means:

(a) — the market share of the *user* determined by *AEMO* on the basis of either or a combination of both:

(i) the percentage of *commissioned* and *decommissioned delivery points* for which the *user* is recorded in the AEMO Registry as the *current user* as compared to the total number of *commissioned* and *decommissioned delivery points* recorded in the AEMO Registry for South Australia on the last day of each month; or

(ii) the total gas withdrawn at the *user’s delivery points*, for which the *user* is recorded in the AEMO Registry as the *current user*, during each month.

“**meter**” means a meter used to measure the amount of gas supplied to a *delivery point* and includes any associated regulators, pipes, fittings, components, equipment or instruments.

“**meter number**” means the unique alpha-numeric identifier assigned to a meter by the *network operator* or *meter manufacturer* within each *jurisdiction*.

“**meter reading**” means reading a *meter* physically or by *telemetry*.

“**meter reading data**” means the data actually obtained by reading a *meter* physically or by *telemetry*, and includes:

for a basic meter — the index reading; and

for an interval meter — the corrected volume of gas delivered in each hour, and such other data as is required for verification by a network operator or provided by the meter in normal circumstances.

“**meter reading route**” means a route specified in a *meter reading schedule*.

“**meter reading schedule**” means a schedule provided by a *network operator* to a *user* under clause 144(1), as amended under clause 145.

“**meter standing data**”, in relation to a *delivery point*, means the information set out in clause 60(1)(a) to 60(1)(j) for the *delivery point*.

“**meter type**” means whether a *meter* is a *basic meter* or an *interval meter*.

“**metering data**” means the information provided by a *network operator* to a *current user* under clause 160, to an *incoming user* under clause 161, and to *AEMO* under clause 162 for the applicable *meter type*.

“**metering period**”, in relation to a *meter reading*, means the period between the current *meter reading* and the previous *meter reading*.

“**MIRN**” means the unique 10-digit numeric meter installation registration number that a *network operator* assigns to each *delivery point* in its *GDS*.

“**MIRN checksum**” means the single digit numeric identifier that is calculated as specified in Appendix 3 for a *MIRN*.

“**MIRN database**” means a database maintained by each *network operator* under clause 58 containing the *MIRN standing data* and information regarding each *delivery point* that is located in the *network operator’s GDS*.

“**MIRN discovery request**” means a notice under clause 74(2) from a *user* to a *network operator*, requesting the *network operator* to provide the *MIRN standing data* for a *MIRN* or a *discovery address*.

“**MIRN standing data**”, in relation to a *delivery point*, means the information set out in clause 58(a) to 58(g) for the *delivery point*.

“**MIRN status**” means (as applicable):

- (a) only, *registered*; or
- (b) in both *jurisdictions, commissioned, decommissioned* or *deregistered*.

{Note: The following table shows each *MIRN status* value and the corresponding *meter status*:}

MIRN status	Meter status
(SA only) Registered	(SA only) A service inlet has been installed at the delivery point
Commissioned	Commissioned and not disconnected or permanently removed
Decommissioned	Disconnected (temporary)
Deregistered	Permanently removed

“**monthly interval-meter load percentage**” or “**MILP**” has the meaning given to it in clause **Error! Reference source not found.**184A.

“**move in**” is defined in clause 78.

“**MSD database**” means a database *maintained* by each *network operator* under clause 60 containing at least the *meter standing data* for each *delivery point* that is located in the *network operator’s GDS*.

“**multi-shipper allocation agreement**” has the meaning given to it under clause 302.

“**multi-shipper allocation report**” has the meaning given to it in clause 302.

“**negative assurance audit**” means a review with the objective of enabling the *auditor* to state whether, on the basis of review procedures, which do not provide all the evidence that would be required in a standard audit, anything has come to the *auditor’s* attention that indicates (as applicable):

AEMO’s non-compliance with the clauses set out in clause 228(1); or

a *network operator’s* non-compliance with the clauses set out in clause 228(1).

“**negative HDD zone**” has the meaning given to that term in Appendix 11.

“**net system load**” has the meaning given to that term in clause 223.

“**network**” means a distribution pipeline within the meaning of the *Gas Pipeline Access Law*.

“**network information system**” means the equipment, hardware and software (including the *network operator databases*) of the *network operator* used for interconnection to the Market Operator’s information system.

“**network operator**” means a *person* who holds a *distribution licence*.

“**new connection**” means the connection of a new *delivery point* to a *sub-network*

“**new connection confirmation notice**” means a notice under clause 66 from a *network operator* to *AEMO* advising *AEMO* that a *delivery point* has been commissioned.

“**nomination estimation methodology**”, has the meaning given to that term in Appendix 2 .

“**non-temperature-sensitive base load**” means the average daily energy consumption that is unaffected by temperature for a *basic-metered delivery point* as advised by the *network operator* from time to time under clause 203.

“**normalisation factor**” for a *basic-metered delivery point* is calculated under clause 225.

“**notice**” means a *notice* given under the [RMP] in accordance with Part 1.3.

“**NSL**” means Net Section Load;

“**open**”, in relation to a *transaction*, means that the *transaction* has been lodged with *AEMO* or a *network operator* (as applicable), but has not been *cancelled* or completed.

“**participant**” means each of a *user* and a *network operator*.

“**pending**” means:

in relation to a *requested transfer* - that *AEMO* has permitted the *requested transfer* under clause 98 to 100, as the case may be, and is waiting for the *network operator* to provide *metering data* that contains an *actual value*; and

in relation to an *open error correction transaction* – that *AEMO* has permitted an *error correction notice* in respect of an incorrect *transfer* under clause 46(1).

Note that an *error correction notice* is *completed* in *AEMO completes* immediately following it being permitted; the *pending* status is therefore not specifically recorded.

“permanent removal” means to permanently preclude gas being supplied at a *delivery point*.

“permanent removal confirmation notice” means a notice under clause 128 from a *network operator* to *AEMO* advising *AEMO* that a *delivery point* has been *permanently removed*.

“permanent removal request” means a notice under clause 125(4) from a *user* to a *network operator* requesting the *network operator* to *permanently remove* a *delivery point* specified in the notice.

“permitted down time” has the meaning given to that term in the *FRC Hub Conditions*.

“physical gate point” means a point defined as such in the relevant *pipeline Access Arrangement* and in any event is a point on the *pipeline* at which gas is withdrawn from the *pipeline* for *injection* into the *GDS*.

“physical gate point metering data” for a *physical gate point* means any two of the three data set out under clause 151(1).

“pipeline” means a pipeline for the transmission of gas to a *network*.

“pipeline corrected injections” has the meaning given to it under clause 220(2).

“pipeline injections” has the meaning given to it under clause 220(1).

“pipeline operator”, in relation to a *GDS*, means the operator of a *pipeline* which is interconnected with the *GDS*.

“pipeline profile forecast”, , means the forecast determined by *AEMO* under clause 207. .

“positive HDD zone” has the meaning given to that terms in Appendix 11

“prescribed person” means a shipper and a self-contracting user.

“pressure control” in relation to a gate point means a control system designed to control the gate point flow rate such that the gate point outlet pressure is maintained within normal equipment tolerances of a set pressure.

“pressure correction factor” means a numerical factor (reflecting pressure, temperature and elevation) which is held in the MSD database for a meter and can be used to convert an uncorrected volume reading from the meter into a corrected volume at —metric standard conditions‖ being a pressure of 101.325 kPa and a temperature of 15°C.

“previous user” means a *user*, who was recorded in the AEMO Registry as the *current user*, immediately prior to the present *current user*.

“Procedures” means these [RMP] (South Australia).

“**process time**” means the time and date a *notice* lodged with *AEMO* or the *data estimation entity* was processed by *AEMO* or the *data estimation entity*, as applicable.

”**profile**” means a profile determined by *AEMO* under clause 209; and

“**promptly**”, in relation to a *notice*, is defined in clause 11(2).

“**proxy ground temperature**” is calculated under clause 177(5)(g).

“**readiness certificate**” means the certificate issued by *AEMO* upon a person required to comply with the [RMP] satisfaction of the *readiness criteria*.

“**readiness criteria**” means the criteria set out in the [SP].

“**readiness testing process**” means the testing process set out in the *readiness criteria*.

“**reading day number**” means a number recorded in a *network operator’s meter reading schedule* to denote which days during the calendar year a *meter* will be read by a *network operator*, and the *meter* reading frequency.

“**reasonable and prudent person**” means a person who exercises that degree of reasonableness, diligence, prudence and foresight that would reasonably and ordinarily be exercised by a skilled and experienced person doing a similar thing in similar circumstances and conditions in accordance with applicable *laws* and standards that are at least equivalent to practices and standards generally accepted within the gas industry in Australia.

“**recalculated**”, , in relation to a profiled forecast, means a profiled forecast recalculated under clause 216(1)(a).

“**recipient**” means any or all of *AEMOs* and each participant, pipeline operator and prescribed person.

“**recipient users**” has the meaning given to it under clause 300A.

“**reconnected**”, in relation to a *disconnected delivery point*, means that the *delivery point’s* ability to flow gas has been restored, although there may be instances where the *meter* valve is left closed.

“**reconnection notice**” means a notice under clause 117(3) from a *user* to a *network operator* requesting *reconnection* of a *delivery point* specified in the notice.

“**reconnection confirmation notice**” means a notice under clause 120 from a *network operator* to *AEMO* advising *AEMO* that a *delivery point* has been *reconnected*.

“**registered**”, in relation to a *MIRN in South Australia* , means that a service inlet (a connection from the main to the meter inlet) has been installed at the *delivery point*.

“**related body corporate**” has the same meaning as it has under section 50 of the *Corporations Act 2001* (Cth).

“**related shipper**” in relation to a *user* for a *sub-network*, means a *shipper* that, from time to time, *injects* gas into the *sub-network* on behalf of the *user*.

“**remaining energy**”, , is the amount calculated under clause 215(3)(a).

“**remaining energy amount**”, , means the amount calculated under clause 215(3)(d).

“**removal request**” means a notice by a pipeline operator to AEMO requesting AEMO to remove the shipper from the shipper register.

“**requested transfer**” means a transfer requested for a delivery point by the lodgement of a transfer request.

“**Specification Pack [SP]**” means the suite of documents, as approved by AEMO, to support the operation of the [RMP].

“**removal request**” means a *notice* by a *pipeline operator* to AEMO requesting AEMO remove the *shipper* from the *shipper register*.

“**requested transfer**” means a *transfer* requested for a *delivery point* by the lodgement of a *transfer request*.

“**revised allocation instruction**” means an instruction for a User that:

(a) specifies how the user’s gas injections into a sub-network are to be allocated between shippers injecting gas into the sub-network on the user’s behalf for a gas day; and

(b) is provided by a user in substitution for:

(i) an allocation instruction for the gas day; or

(ii) an allocation made by AEMO under clause 192(2) for the gas day.

“**revised estimate of unaccounted for gas**” is calculated under clause 223(2)(b).

“**revised user’s unaccounted for gas**” means the amount calculated under clause 223.

“**ROLR**”, in relation to a *delivery point*, means the supplier of last resort as defined in the Energy Supply Act 1994 (WA).

“**ROLR administrator**” means a person specified as such under South Australian law from time to time.

“**ROLR scheme**” means as specified under South Australian law from time to time.

“**scheduled meter reading**” means a *meter reading of a delivery point* that is scheduled to occur under the *network operator’s meter reading schedule*.

“**secondary recipient**” means a person to whom a *recipient* discloses information.

“**self-contracting user**” means a *user* that withdraws gas from a *sub-network* for the sole purpose of supply to a *customer* that is either itself or a *related body corporate*.

“**service order reference**” means the unique identifier used to identify a *user’s* service order as either:

(a) specified by a *user* under clauses 105(3)(b)(i), 117(3)(b) or 125(4)(b)

(b) assigned by AEMO under clause 81(5).

“**settlement period**” has the meaning given to it under clause 218(3).

“**shipper**” means a person that has a gas transportation agreement with a *pipeline operator* for the delivery of gas at a *gate point* to a *user*, and is not acting in its capacity as a *swing service provider* if it is also a *swing service provider*.

“**shipper profile forecast**” means, , the forecast produced under clause 206.

“**shipper register**” means the register of shippers providers set up under clause 173.

“**shipper’s deemed injection**” is defined in clause 246.

“**shipper register**” means the register of *shippers* providers established under clause 173.

“**shipper’s quantity**”, , has the meaning given to it in clause 206.

“**small use customer**” — has the meaning given to it under section 4 of the *Gas Act 1997*; and

“**small use customer indicator**” means, only, the indicator of a *customer’s* annual consumption of gas determined by *AEMO* for each *basic-metered delivery point* under clause 373B.

“**special meter reading**” means a *meter reading* undertaken other than under a *meter reading schedule*.

“**start of business**” means 0800 hours in the relevant *jurisdiction*.

“**status report**” has the meaning given to it in clause **Error! Reference source not found.**228.

“**street/suburb combination**” means a combination of a:

- (a) street name; and
- (b) street type code; and
- (c) street suffix; and
- (d) the suburb, place or locality in which the street is located; and
- (e) *State/Territory*; and
- (f) post code.

“**street/suburb table**” means a table of *street/suburb combinations* extracted from a *MIRN database* under clause 59.

“**sub-network**” means:

(a) a part of a *GDS* which a *network operator* identifies under clause 15 as a sub-network for contractual and operational purposes and which is listed in Appendix 1 ;
or

(b) a farm tap sub-network.

“**sub-network (basic-meter) profile forecast**”, , is calculated under clause 205(1)(a).

“**sub-network (interval-meter) profile forecast**” , , is calculated under clause 205(1)(b).

“**sub-network profile forecast**”, , is calculated under clause 205(2).

“**substituted value**” means a value designated as such under clause 157.

“**summed basic-meter reconciliation amount**”, for a *user*, is a quantity of gas and is calculated under clause 204.

“**system down time**” has the meaning given to it in clause 304.

“**Technical Regulator**” has the meaning given to “Technical Regulator” under Section 4 of the Gas Act 1997 (SA).

“**telemetry**” means the communication equipment used for transmission of data collected from *meters* to a *network operator's* central data management system and typically encompasses modems, telecom landline (which may be dedicated or part of the PSTN network) or radio transceivers (which may be in the form of a dedicated radio network, GSM, GPRS or satellite telephony).

“**temperature sensitivity heating rate**” means the rate at which the energy consumption for a *delivery point* varies with change in the *heating degree day* value as advised by the *network operator* from time to time under clause 203.

“**T_{max}**” has the meaning given to it in clause 177(3)(a).

“**T_{min}**” has the meaning given to it in clause 177(3)(b).

“**total corrected injections**” for a *sub-network* is calculated under clause 221.

“**total sun hours**” is calculated under clause 177(5)(f).

“**transaction**” means the process initiated by the lodgement of a *notice* with AEMO under these Procedures, which if completed, will result in an amendment to the AEMO *standing data*

“**transfer**” means the transfer under the [RMP] of the responsibility for gas delivery to a *delivery point* from the *current user* to an *incoming user*.

“**transfer confirmation**” means a notice under clause 102 that the *transfer* of the *delivery point* specified in the notice has occurred.

“**transfer day**” means the *gas day* commencing at the *transfer time*.

“**transfer objection**” means (as applicable) a notice under clause 86(2) from a *network operator*

“**transfer objection resolution period**” means (as applicable):

(a) if a *transfer objection* has been lodged under clause 86(1) - the period ending when the time allowed for lodging a *transfer objection withdrawal notice* under clause 91(1) expires; or

(b) if a *transfer objection* has not been lodged under clause 86(1) - the period ending when the time allowed for lodging a *transfer objection* under clause 86(1) expires.

“**transfer objection withdrawal notice**” means a notice under clause 91 from a *participant* to AEMO withdrawing an *open transfer objection* for a *delivery point* specified in the notice .

“**transfer request**” means a notice under clause 81(1) from an *incoming user* to *AEMO* requesting *AEMO* to *transfer* gas deliveries at a *delivery point* specified in the request to the *incoming user*.

“**transfer time**” means the start of the *gas day*;

during which a *basic meter reading* that generates an *actual value* for a basic metered *delivery point* for which a *transfer* is *pending*, was undertaken, or

that an incoming user has specified as the earliest transfer day for an interval metered delivery point.

“**transfer withdrawal notice**” means a notice under clause 95(4) from an *incoming user* to *AEMO* withdrawing an *open transfer request* for a *delivery point* specified in the notice.

“**transferring customer**” means the *customer* located at the *delivery point* specified in a *transfer request*.

“**transmission contract**” means a contract between a *pipeline operator* and *shipper* for the transmission of gas through a *pipeline*.

“**uncovered sub-network**” means a *sub-network* which is not:

(a) a “covered pipeline” as defined in the *National Gas Law*; or

(b) subject to any other third party access regime under a *law* or under an instrument having effect under a *law*.

“**user**” means an entity that has a *haulage contract* for the transport of gas through a *sub-network* under the [RMP].

“**user’s (basic-meter) profile forecast**” , is calculated under clause 204(1)(b).

“**user’s basic-metered withdrawals**” has the meaning given to it under clause 230.

“**user’s daily forecast**” , , is calculated under clause 204(3).

“**user’s estimated basic-metered withdrawals**” or “**UEBW**” is calculated under clause 227.

“**user’s estimated total withdrawals**” for a user for a sub-network for a gas day is calculated under clause 228.

“**user’s gas injections**” has the meaning as given to it in clause 187.

“**user’s (interval-meter) profile forecast**” , , is calculated under 204(1)(d).

“**user’s interval-metered withdrawals**” or “**UIW**” is calculated under clause 222.

“**user’s profile forecast**” , , is calculated under clause .

“**user’s required withdrawals**” means for a user for a gas day the sum of:

UDBW;

UIW;

UAUAFG

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“UUAFG” is defined in clause 229(2)

“**verification**” means the process undertaken by a *network operator* in accordance with the verification guidelines contained in sections 2.2.1 and 2.2.2 of Appendix 2 to ensure the accuracy of the *metering data*.

3 Interpretation

(1) In this document, unless the contrary intention appears:

a) a reference to:

- (i) one gender includes any other gender; and
- (ii) *the singular includes the plural and the plural includes the singular; and*
- (iii) *an officer or body of persons includes any other officer or body for the time being exercising the powers or performing the functions of that officer or body; and*
- (iv) *these clauses or any other instrument includes any variation or replacement of any of them; and*
- (v) *a reference to a law includes any amendment or re-enactment of it that is for the time being in force, and includes all laws made under it from time to time; and*
- (vi) *any statute includes that statute as amended or re-enacted from time to time and any statute enacted in replacement of it; and*
- (vii) **“writing”** or **“written”** *includes communication by facsimile and any other electronic means or format in accordance with this document and the [ICD]; and*
- (viii) **“under”** *includes “by”, “by virtue of”, “pursuant to” and “in accordance with”; and*
- (ix) **“day”** means a calendar day; and
- (x) *a quantity of gas is to an energy quantity (expressed in whole MJ), rather than a volumetric or other quantity; and*
- (xi) **“person”** *includes a public body, company, or association or body of persons, corporate or unincorporated; and*
- (xii) *a person includes a reference to the person's personal representatives, executors, administrators, successors and permitted assigns; and*

b) all monetary amounts are in Australian dollars and are exclusive of GST; and

c) headings are for convenience only and do not affect the interpretation, or form part of, this document; and

d) “copy” includes a facsimile copy, photocopy or electronic copy; and

e) “including” and similar expressions are not words of limitation; and

- f) where a word or expression is given a particular meaning, other parts of speech and grammatical forms of that words or expression have a corresponding meaning; and
- g) where italic typeface has been applied to some words and expressions, it is solely to indicate that those words or phrases may be defined in clause 2 or elsewhere, and in interpreting this document, the fact that italic typeface has or has not been applied to a word or expression is to be disregarded; and
- h) where information in this document is set out in braces (namely “{” and “}”), whether or not preceded by the expression “Note”, “Outline” or “Example”, the information:
 - (i) is provided for information only and does not form part of this document; and
 - (ii) is to be disregarded in interpreting this document; and
 - (iii) might not reflect amendments to this document.

(2) In this document and despite any inconsistency with Schedule 2 of the National Gas Law:

- a) a reference to a meter reading “of a delivery point” is a reference to a meter reading of the meter at the delivery point;
- b) a reference to the current user “for” a delivery point is a reference to the user who is recorded in the Market Operator registry as the user responsible for gas delivery to the delivery point.
- c) a reference to the network operator “for” a delivery point is a reference to the network operator of the GDS in which the delivery point is located;
- d) when discussing a delivery point, a reference to a MIRN is a reference to the MIRN for the delivery point;
- e) when discussing a MIRN, a reference to a delivery point is a reference to the delivery point identified by the MIRN;
- f) when discussing a delivery point or a MIRN, a reference:
 - (i) to “the user” or “the current user” is a reference to the current user for the delivery point; and
 - (ii) to “the incoming user” is a reference to the incoming user for the delivery point; and
 - (iii) to “the meter” is a reference to the meter which measures gas withdrawals at the delivery point; and
 - (iv) to “the sub-network” is a reference to the sub-network in which the delivery point is located; and
 - (v) to “the network operator” is a reference to the network operator for the sub-network in which the delivery point is located; and

- (vi) to *“the MIRN status”* is a reference to the delivery point’s MIRN status; and
 - (vii) to *“the previous user”* is a reference to the user that was the current user for the delivery point before a transfer; and
- g) when discussing a *notice*, a reference:
- (i) to *“the user”* is a reference to the current user for the delivery point or MIRN specified in the notice; and
 - (ii) to *“the delivery point”* is a reference to the delivery point identified by the MIRN specified in the notice; and
 - (iii) to *“the MIRN”* is a reference to the MIRN identifying the delivery point to which the notice relates; and
 - (iv) to *“the current user”* is a reference to the current user for the delivery point or MIRN specified in the notice; and
 - (v) to *“the network operator”* is a reference to the network operator for the delivery point or MIRN specified in the notice is located; and
 - (vi) to *“the discovery address”* is to the discovery address specified in the notice; and
 - (vii) to *“the MIRN status”* is to the MIRN status of the MIRN specified in the notice; and
 - (viii) to the *“previous user”* is to the user who was the current user for the delivery point identified by the MIRN specified in the notice before a transfer takes effect for the delivery point.
- h) when discussing a *gate point*, a reference to:
- (i) the pipeline for the gate point is reference to the pipeline that interconnects with a sub-network at the gate point; and
 - (ii) the pipeline operator for the gate point is a reference to the pipeline operator of the pipeline that interconnects with a sub-network at the gate point; and
 - (iii) the sub-network for the gate point is a reference to the sub-network that interconnects with a pipeline at the gate point; and
 - (iv) the network operator for the gate point is a reference to the network operator for the sub-network that interconnects with a pipeline at the gate point; and
 - (v) a user for the gate point is a reference to a user for the sub-network that interconnects with a pipeline at the gate point; and

(vi) a related shipper for the gate point is a reference to a shipper on the pipeline that interconnects with a sub-network at the gate point that, from time to time injects gas into the sub-network on behalf of a user for the sub-network; and

i) when discussing a *sub-network*, a reference to a *user* for the *sub-network* is a reference to:

(i) each user that is the current user for at least one delivery point in the sub-network; or

(ii) *each user that was previously, but is no longer, the current user for at least one delivery point in the sub-network, until such time as AEMO records a user's GBO identification as "deregistered" in the AEMO Registry under clause 22(10).*

(3) In this document and despite any inconsistency with Schedule 2 of the National Gas Law, a reference to "gas day D" is a reference to whichever gas day is designated by the clause as such, and references to "gas day D-1" and "gas day D+1" are, respectively, references to the gas day before gas day D and the gas day after gas day D, respectively, and so on.

{Example: In clause **Error! Reference source not found.**, if Wednesday is designated *gas day D*, a reference to *gas day D-1* in clause **Error! Reference source not found.** is a reference to Tuesday.}

4 There is no clause 4

5 Meter readings deemed to occur at the start of the gas day

A meter reading of a delivery point taken at any time in a gas day is deemed to be a meter reading of the delivery point at the start of the gas day.

6 Calculations, rounding and measurements

(1) For the purposes of this document, one hundred cubic feet equals 2.832 cubic metres.

(2) AEMO and each participant, pipeline operator and prescribed person must comply with Appendix 5 in respect of calculations, rounding and units under this document.

6A Time under these Procedures

(1) Despite clause 28 of Schedule 2 to the National Gas Law, AEMO must operate the *AEMO information system* and date and time stamp *transactions* under these *Procedures*, including the *process time*, on the basis of market standard time, which is Greenwich Mean Time plus 10 hours.

(2) A reference in these Procedures:

- a) as to “gas day”:
 - (i) *a reference in these Procedures to a day or date is a reference to the gas day commencing on the day or date referred to, and ending on the following day or date; and*
 - (ii) *references to months, quarters and years are to be given a corresponding meaning; and*
 - (iii) *in reckoning periods of months, quarters and years, the 6 or 8 hour offset (as applicable in each jurisdiction) between months, quarters and years reckoned under clause 6A(2)(a)(ii) and calendar months, quarters and years, is to be disregarded; and*
- b) to “**0000 hours**” on a day is to midnight at the start of the day in the relevant jurisdiction; and
- c) to “**2400 hours**” on a day is to midnight at the end of the day in the relevant jurisdiction; and
- d) There is no clause 6A (2)(d)
- e) to a 24 hour period, includes a period adjusted for daylight savings as agreed between AEMO and the persons required to comply with these Procedures in South Australia, such that whether it is the start or end of the daylight savings period, it includes a period of 23 and 25 hours respectively.

{Note: only the clauses referred to under clause 6A(d) operate on EST and are excluded from daylight savings. All other clauses are to operate on local or CST and are adjusted for daylight savings. The purpose for the distinction in timing detailed in clause 6A(d) is to align the timing provisions in the Procedures with the requirements under the STTM, which operate on EST and exclude daylight savings.}

Part 1.2 Compliance with obligations under these Procedures

7 Obligation to act as a reasonable and prudent person

Market Operator requirement. The [SOSA] govern the matters referred to in this clause.

Part 1.3 Notices

8 Requirements of effective notices and nominated contact details

- (1) Subject to this Part Part 1.3, a notice or other communication connected with this document has no legal effect unless it is in writing and either sent in the format required under clause 9, or if no format is specified, given as follows:
 - a) sent by electronic mail transmission or any other method of electronic communication to the nominated electronic address of the addressee; or,
 - b) sent by facsimile to the nominated facsimile number of the addressee; or

- c) delivered by hand to the nominated office of the addressee; or
 - d) sent by post to the nominated postal address of the addressee.
- (2) Each person required to have a GBO identification under clause 22(2), must prior to being issued a GBO identification under clause 22(2)(b), provide AEMO with their nominated contact details for at least the type of address and contact details referred to in clause 8(1) (or such address and contact details as AEMO may request from time to time), and keep AEMO and all other persons with a GBO identification, informed of any changes to these details as may occur from time to time.
- (3) AEMO may, by notice to each person who is required under clause 22(2) to have a GBO identification, nominate more than one electronic address for the purposes of electronic communications to AEMO under clause 8(1)(a).
- (4) A person who is required to have a GBO identification under clause 22(2) (other than AEMO) may, by notice to AEMO:
- a) for the purposes of electronic communications under clause 8(1)(a) from AEMO to the person – request AEMO to consent to the person nominating more than one electronic address, and AEMO must within *2 business days notify* the person that it consents to such a request unless there are reasonable grounds for AEMO withholding consent; and
 - b) for any other electronic communications under clause 8(1)(a) – nominate more than one electronic address.
- (5) A notice under clause 8(3) or 8(4) must:
- a) clearly state each electronic address and the electronic communications for which each electronic address must be used; and
 - b) specify a date from which the electronic addresses must be used for electronic communications, which must not be less than 12 business days from the date that the notice is given.
- (6) If a notice under clause 8(3) or 8(4) is given by a person other than AEMO, AEMO must notify each person who is required under clause 22(2) to have a GBO identification of the contents of the notice within 2 business days of receiving the notice, and if clause 8(4)(a) applies, whether AEMO consents to the person's nomination.
- (7) In an emergency, or other situation where a reasonable and prudent person would consider itself justified in departing from the requirements of clause 8(1), a person may give a notice other than in accordance with clause 8(1), but if so the person must, as soon as practicable, confirm the notice in writing and by a method prescribed by clauses 8(1)(a) to 8(1)(d).

9 Format of notices

Notices given under these Procedures are to be in accordance with the format specified in the [ICD] as contained in the [SP].

10 There is no clause 10

11 Delivery times for notices

(1) If a person (“**sender**”) is required under the [RMP] to give a *notice* “**immediately**” in:

- a) AseXML format — then subject to clause 11(3), the *sender* must ensure that the *notice* is despatched from the *sender’s* gateway within a time consistent with a “medium priority transaction” as defined in section 2.5.5 of the “FRC B2M-B2B Hub System Specifications” in the [SP]; or
- b) any other format — the *sender* must ensure that the *notice* is delivered to the recipient within 4.5 hours.

(2) If a person (“sender”) is required under the [RMP] to give a notice “promptly” in:

- a) AseXML format — then subject to clause 11(3) it must ensure that the notice is despatched from the sender’s gateway within a time consistent with a “low priority transaction” as that term is defined in section 2.5 of the “FRC B2M-B2B Hub System Specifications” in the [SP]; or
- b) any other format — the sender must ensure that the notice is delivered to the recipient by close of business on the next business day.

(3) A sender’s obligations under clause 11(1)(a) and 11(1)(b) do not apply during permitted down time.

12 Notices by facsimile, hand delivery or post

(1) Any notice given in accordance with clauses 8(1)(b) to 8(1)(d) will be deemed to have been received:

- a) subject to clause 12(2), if transmitted by facsimile or delivered by hand before *close of business* on a *business day*, at the time of transmission or on the day of delivery (as applicable), or otherwise at *the start of business* on the next *business day*; or
- b) if sent by mail within Australia, on the second *business day* after posting (being, in each case, the time of day at the intended place of receipt of the *notice*),

(2) A facsimile is not deemed given and received unless:

- a) at the conclusion of the transmission the sender's facsimile machine issues a transmission report which indicates that the relevant number of pages comprised in the notice have been sent; and
- b) if it is not received in full and in legible form — the addressee notifies the sender of that fact within 3 hours after conclusion of the transmission or by

12 noon on the business day on which it would otherwise be deemed given and received, whichever is the later.

12A Notices by email

(1) A *notice* sent by email is neither given nor received under the RMP until the person sending the email (“**sender**”) receives an *automated response message* for the email from the person to whom the email was addressed (“**addressee**”).

(2) It is the sender’s responsibility for each attempted email to:

- a) verify that it receives an automated response message; and
- b) if it does not receive an automated response message, arrange either for retransmission of the email, or for communication of the information contained in the email by an alternative medium.

(3) For the purposes of these Procedures, unless the addressee proves otherwise, an email is deemed to have been given by the sender and received by the addressee if:

- a) an automated response message for the email is received by the addressee before close of business, at the date and time shown in the automated response message; or
- b) otherwise, at start of business on the next business day.

(4) For the purposes of these Procedures an automated response message:

- a) is not an email that requires receipt of a further automated response message in order for the automated response message to have been validly sent and received; and
- b) should not be generated in response to other automated response messages.

13 AEMO may lodge and accept notices on behalf of a self-contracting user

No [BS] requirement. Refer to [RMP] for context only.

Part 1.4 These Procedures and other instruments

14 Other Instruments

(1) Each person required to comply with these Procedures, must also comply with the following documents (as applicable):

- a) the AEMO Specification Pack; and
- b) FRC Hub Operational Terms and Conditions.

(2) There is no clause 14(2).

(3) In the event of any inconsistency between the provisions of these Procedures and either of the documents listed in clause 14(1), the inconsistency is to be resolved by giving precedence to these Procedures.

- (4) AEMO must publish the AEMO Specification Pack and the FRC Hub Operational Terms and Conditions, as amended from time to time.

14A Amendment

(1) Except otherwise specified in clause 14A(2), the AEMO Specification Pack may only be amended by AEMO undertaking one of the following consultative procedures:

- (a) the ordinary process for making Procedures under rule 135EE of the Rules;
or
- (b) the expedited process for making Procedures under rule 135EF of the Rules.

(2) If a User or Network Operator 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 User or Network Operator or AEMO must:

- (a) 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
- (b) 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
- (c) where a User or Network Operator or AEMO has received a notice as set out in clause 14A(2)(b), AEMO, all Users or Network Operator 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.

14B FRC HUB Operating Terms and Conditions

(1) In accordance with the certification process (Gas FRC Business to Business Connectivity Testing and System Certification) maintained and published by AEMO, AEMO and each user and network operator must be certified by AEMO prior to using the FRC HUB for transactions specified in the AEMO Specification Pack.

(2) A breach by a user or network operator 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.

(3) Where a user or network operator 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:

- a) must notify the user or network operator of the breach; and

b) may take any action in relation to the breach, including issuing a direction to the user or network operator under section 91MB(4)(b) of the Law to rectify the breach or to take specified measures to ensure future compliance (or both).

(4) Where a user or network operator continues to use the FRC HUB in breach of the FRC HUB Operational Terms and Conditions after a notice of a breach under clause 14B(3) has been provided to the user or network operator, 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.

14C Additional FRC HUB outages

(1) After consultation with affected Network Operators and Users, 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”).

(2) AEMO must publish details of the additional FRC HUB outage at least 7 days before the outage commences.

(3) 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.

Part 1.5 Appendices

15 Identification of sub-networks, gas zones and gate points

(4) A network operator must code each gas zone and each gate point in its sub-network under Appendix 1 .

(5) Each sub-network and each gate point as at the go-live date is listed with its identifying code in Appendix 1 .

(6) A network operator, acting as a reasonable and prudent person, may propose to establish a new sub-network that is not listed with an identifying code in Appendix 1 that is applicable to the jurisdiction in which the network operator’s GDS resides, and if it does so, it must notify AEMO of the proposed new sub-network, and in South Australia of the HDD zone for the new sub-network, at least 20 business days before the sub-network becomes operational.

(7) Upon receipt of notification under clause 15(3) AEMO must verify the establishment of the new sub-network, and, if satisfied with its verification, must publish to each participant, pipeline operator and prescribed person an update to the relevant section of Appendix 1 specifying the new sub-network and its identifying code and any applicable new gate point and its code, and an update to Appendix 11 specifying the HDD zone for basic-metered delivery points in the new sub-network.

Notification format defined in [ICD: NOT-SNC ‘Notice of new sub-network code’]

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16 There is no clause 16

Part 1.6 There is no Part 1.6

17 There is no clause 17

2. The Databases

Part 2.1 The AEMO Registry

18 The registry is deemed to be correct

- (1) If there is an inconsistency between an item of the AEMO standing data for a delivery point and an item in another database, then for the purposes of this document and in the absence of manifest error the AEMO standing data is deemed to be correct.
- (2) Nothing in clause 18(1) limit participants' obligations to lodge a data change notice under clause 27, or an error correction notice under clause 32.
- (3) Nothing in clause 18(1) limits participants' ability to enter into agreements to address or correct errors or inaccuracies in the AEMO standing data for a delivery point, subject to participants ensuring they comply with their obligation under clause 26.

19 Maintenance and administration of the AEMO Registry

- (1) The GRMS Operations staff must maintain and administer the AEMO Registry, which shall be held in AEMO.
- (2) AEMO must include all delivery points in South Australia.

20 AEMO standing data

(1) The GRMS Operations staff must ensure that AEMO includes at least the following accurate information in respect of each delivery point under this document from the sources listed below:

	Information	Source
a)	The MIRN; and	network operator
b)	The <i>MIRN status</i> ; and	<i>network operator</i>
c)	The first date on which the <i>MIRN</i> became <i>commissioned</i> ; and	<i>Market Operator (AEMO)</i> , based on the date notified to it by the <i>network operator</i> under clause 65(2)(b).
d)	the current user; and	In the case of a <i>new connection</i> — <i>network operator</i> . In all other cases — <i>Market Operator (AEMO)</i> .
e)	the <i>ROLR</i> ; and	<i>Market Operator (AEMO)</i> (based on the market jurisdiction)
f)	the <i>network operator</i> ; and	<i>network operator</i>

	Information	Source
g)	whether the <i>delivery point</i> is equipped with an <i>interval meter</i> or a <i>basic meter</i> ; and	<i>network operator</i>
h)	the <i>gas zone</i> ; and	<i>network operator</i>
i)	there is no clause 20(1)(i)	
j)	the <i>small use customer indicator</i> ; and	<i>AEMO</i>
k)	non-temperature-sensitive base load; and	<i>network operator</i>
l)	<i>temperature sensitivity heating rate</i> ; and	<i>network operator</i>
m)	the <i>last date of modification</i> ; and	<i>AEMO</i>
n)	the last person to initiate a modification to <i>AEMO</i> for the <i>MIRN</i> ; and	<i>AEMO</i>

(2) In clause 20(1) “source” means the person responsible for providing the information to AEMO, not necessarily the person who is the originating source of the information.

Note: If there is no *ROLR scheme*, then the item of *AEMO standing data* in clause 20(1)(e) will be a dummy *GBO identification*.

21 Current user remains financially responsible for a delivery point

A *user* remains recorded in *AEMO* as the *current user* for a *delivery point* until such time as:

- (1) the *MIRN* status is deregistered; or
- (2) a transfer occurs in respect of the *delivery point*; or
- (3) *AEMO* accepts an error correction transaction in respect of the *delivery point*.

21A FRC Hub Certification

No [BS] requirement. Refer to [RMP] for context only.

21B Readiness Certification

No [BS] requirement. Refer to [RMP] for context only.

22 GBO identification

(1) AEMO must have a GBO identification

(2) AEMO must upon issuing a FRC Hub compliance certificate under clause 21A(3) and a readiness certificate under clause 21B:

- a) notify each person required to have a GBO identification under clause 22(2)(2), of AEMO's GBO identification; and
- b) determine and issue a GBO identification for the person for each capacity in which it operates under the [RMP]; and
- c) communicate, by means of a notice at least 3 months prior to go-live, each GBO identification to the GRMS operations staff, who must on receipt of such notice, record the status of the GBO identification issued under clause 22(2)(b) as "active" in the AEMO Registry; and

Notification format defined in [ICD: NOT-GBO 'Notice of Market Operator GBO Identification']

- d) within 1 business day of issuing a GBO identification under clause 22(2)(b), notify, by means of a notice, all other persons with a GBO identification under the [RMP] of the GBO identification for the new person and provide them with the information set out in clauses 22(4)(a) to 22(4)(c).

(3) AEMO must ensure that each person required to have a GBO identification under these Procedures has a different GBO identification for each capacity in which it operates under the Procedures, including for example:

- a) a user that is also a ROLR must have a different GBO identification for its role as a user and its role as a ROLR; and
- b) a shipper that has contracts for the transportation of gas through more than one pipeline must have a different GBO identification as a shipper on each pipeline; and
- c) a pipeline operator that operates as a pipeline operator and a SSPOLR must have a GBO identification for each role.

(4) AEMO must ensure that the AEMO registry holds at least the following accurate information in respect of each GBO identification issued by AEMO under clause 22(2)(b):

- a) the name of the person; and
- b) the capacity in which the person operates in respect of the GBO identification; and
- c) the status of the GBO identification, being either "active", "suspended" or "deregistered"; and
- d) the person's nominated contact details as set out in clause 8(2); and

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- e) the effective date of any change to the information set out in clause 22(4)(a) to clause 22(4)(c).

(5) Upon any detail changing under clause 22(4), AEMO must within 24 hours of making the change, notify all other persons with a GBO identification that an amendment has been made and provide them with the updated information as set out in clauses 22(4)(a) to 22(4)(e).:

Notification format defined in [ICD: GBO-CHNG 'Notice of change to GBO information']

(6) AEMO must record a person's GBO identification is to be recorded as "suspended" within AEMO:

- a) there is no clause 22(6)(a); and
- b) if the person is a party to an agreement entered into under the [RMP] which provides for the person's GBO identification to be recorded as "suspended" — in accordance with the terms of the agreement.

Notification format defined in [ICD: GBO-STATUS-CHNG 'Notice of change to GBO Status']

(7) The consequences of a person's GBO identification being recorded as "suspended" in AEMO are:

- a) the person must continue to comply with its obligations under the [RMP]; and
- b) for a user — without limiting clause a), the user is not entitled to exercise any rights granted to it under section 2, section **Error! Reference source not found.**, or section **Error! Reference source not found.**; and
- c) there is no clause 22(7)(c);
- d) there is no clause 22(7)(d).

(8) To avoid doubt, recording a person's GBO identification as "suspended" in AEMO has no effect on the operation of Chapter 5.

{Note: This means that a user with a —suspended\ GBO identification will continue to be included in the allocation and reconciliation calculations.}

(9) If a person was "suspended" under clause 22(6), then when the agreement provides that the person's GBO identification should be marked as "active", AEMO must notify the GRMS operations staff by means of a notice that a person's GBO identification is to be recorded as "active" within AEMO:

Notification format defined in [ICD: GBO-STATUS-CHNG 'Notice of change to GBO Status']

The notice must include the date on which the change in GBO identification status is to be amended. Upon receipt of such notice, the GRMS Operations staff must update AEMO such that the GBO identification is recorded as “suspended” from the effective date.

(10) AEMO must notify the GRMS operations staff by means of a notice that a person’s GBO identification is to be recorded as “deregistered” within AEMO:

- a) if the person is no longer required to comply with the [RMP]—upon AEMO being notified that the person is no longer required to comply with these Procedures;
- b) there is no clause 22(10)(b); and
- c) if the person ceases to act in the capacity under the [RMP] to which the GBO identification relates — upon that person ceasing to act in that capacity; and
- d) upon the person exiting the market under clause 377B.

(11) The consequence of a person’s GBO identification being recorded as “deregistered” in AEMO is that the person is no longer required to comply with the [RMP] and is not entitled to accrue any rights under the [RMP].

23 AEMO to provide bulk AEMO standing data

The purpose of this clause is to allow AEMO and participants to compare their databases at a particular time.

(1) In this clause, “Bulk AEMO standing data”:

- a) in relation to a network operator — means the AEMO standing data for every delivery point in the network operator’s GDS; and
- b) in relation to a user — means the AEMO standing data for every delivery point for which the user is the current user.

(2) A participant may request the GRMS Operations staff, by means of a notice, to provide the participant with bulk AEMO standing data “**Bulk AEMO standing data request**”.

Notification format defined in [ICD: REQ-BSD: ‘Request for Bulk AEMO standing data’]

(3) A bulk AEMO standing data request is valid only if the participant requesting the bulk AEMO standing data has an active GBO identification.

(4) Upon receipt of a bulk AEMO standing data request that is not valid, the GRMS Operations staff must immediately notify the participant that lodged the bulk AEMO standing data request, by means of a notice, that the bulk AEMO standing data request has been rejected and provide the reason why the bulk AEMO standing data request is not valid.

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Notification format defined in [ICD: NOT-BSD-REJ: 'Notification that Request for Bulk AEMO standing data is rejected']

(5) If the request is valid, subject to clause 23(6) the *GRMS Operations staff* must provide *bulk AEMO standing data*:

- a) to each participant on a quarterly basis; and
- b) subject to clause 23(7), to a participant upon receiving a valid bulk AEMO standing data request; and

(6) AEMO must:

- a) notify the participant, by means of a notice, of the time and date on which it will generate bulk AEMO standing data, which must be at least 5 business days after the date of notification under this clause 23(6)(a); and

Notification format defined in [ICD: NOT-SDGEN Notice of the date and time of AEMO standing data generation']

- b) generate the bulk AEMO standing data at the time and on the date notified under clause 23(6)(a); and
- c) provide the bulk AEMO standing data, by means of a bulk electronic file, to the participant within 2 business days after the date of generation under clause 23(6)(b).

Notification format defined in [ICD: PROV-BSD Provision of Bulk AEMO standing data].

(7) AEMO may, by having regard to the number of *bulk AEMO standing data requests* made by a *participant*, impose a limit on the number of requests that a *participant* may lodge in any 30 day period for a fixed or indefinite period.

Part 2.2 Changing the AEMO Registry

24 Purpose of this Part

The purpose of Part 2.2 is to ensure that *the AEMO Registry is accurate*.

25 AEMO must keep the registry accurate

(1) AEMO must not knowingly permit the AEMO Registry to be materially *inaccurate*.

(2) If AEMO becomes aware of a material *inaccuracy* in the AEMO Registry, then:

- a) if it is the source for the item of the AEMO standing data under clause 20(1)2(1) — it must as a reasonable and prudent person correct the inaccuracy; or

- b) if it is not the source for the item of the AEMO standing data under clause 20(1) — it must notify the network operator as soon as practicable and provide details of the inaccuracy.

26 Participants must keep the AEMO Registry accurate

(1) Without limiting clause 27 or clause 32, a *participant* must not knowingly permit the AEMO Registry to be materially *inaccurate*.

(2) A *network operator* may discharge its duty under clause 26(1) by, as soon as practicable

- a) lodging a data change notice under clause 27(1)(a); or
- b) notifying the GRMS operations staff under clause 27(1)(b) that multiple data change transactions are required and should be dealt with as a bulk transaction; or
- c) lodging an error correction notice under clause 32(3) in respect of having lodged an incorrect new connection confirmation notice or incorrect permanent removal confirmation notice.
- d) in respect of items 20(1)(k) and 20(1)(l) of the AEMO standing data for basic-metered delivery points — complying with its obligations under clause 203.

(3) A *current user* may discharge its duty under clause 26(1) by, forthwith notifying:

- a) the previous user under clause 32(1)(a) that it incorrectly lodged a transfer request; or
- b) the network operator under clause 32(1)(b).

(4) A *previous user* may discharge its duty under clause 26(1) by, forthwith lodging an *error correction notice* under clause 32(2) in respect of an incorrect *transfer request* having been lodged by the *current user*.

(5) The previous user, current user, and the network operator must, where appropriate and reasonable, cooperate and assist AEMO with maintaining accurate AEMO standing data in the AEMO Registry and correcting incorrect delivery point transactions by providing all reasonable assistance to AEMO in relation to a data change transaction and an error correction transaction (as applicable).

27 Data change notice

(1) If the *network operator* for a *delivery point* becomes aware of a change to, or an inaccuracy in, items 20(1)(f), 20(1)(g), 20(1)(h), 20(1)(k), 20(1)(l) of AEMO *standing data* for which it is the source under clause 20(1), then it must as soon as practicable:

- a) lodge a data change notice for the delivery point, by means of notice, with the GRMS Operations staff; or

Notification format defined in [ICD: DCN 'Data Change Notice']

- b) notify the GRMS operations staff, by means of notice, that multiple data change transactions are required and these should be dealt with as a bulk transaction under clause 27(1)(a)31.

Notification format defined in [ICD: DCN-MULT 'Multiple Data Change Notice']

- (2) If the GRMS operation staff determine that the multiple data change transactions referred to in clause b) should not be dealt with as a bulk transaction, then:

- a) the GRMS operation staff must promptly notify, by means of a notice, the network operator or the provider of BL and HR (as applicable) of this determination; and

Notification format defined in [ICD: DCN-NO-MULT-NOTF 'Notification that Multiple Data Change Notice is not appropriate']

- b) The network operator must lodge a data change notice under clause a) in respect of each delivery point affected by the network operator's proposed change to AEMO standing data.

- (3) A data change notice must specify at least the following information:

- a) the MIRN; and
- b) the GBO Identification of the network operator lodging the data change notice; and
- c) the proposed amendment to AEMO standing data; and
- d) the reason for the proposed amendment; and
- e) the earliest date that the proposed amendment to AEMO standing data can be registered in AEMO.

28 Requirements for valid data change notice

A Data Change Notice is only valid if:

- a) the delivery point exists within AEMO; and
- b) the delivery point's MIRN status is commissioned or decommissioned; and
- c) there is not in relation to the delivery point:
 - (i) an open data change transaction within AEMO for the same item of AEMO standing data, where the effective date of the open data change transaction is on or after the effective date of the data change notice being validated; or
 - (ii) an open transaction that is not a data change transaction within AEMO, specifically:
- d) it is lodged by the network operator who has an active GBO identification; and

- e) the proposed amendment only relates to items 20(1)(f), 20(1)(g), 20(1)(h), 20(1)(k), 20(1)(l) of AEMO standing data; and
- f) the proposed amendment relates to item 20(1)(h) of the AEMO standing data, that the gas zone exists within AEMO; and
- g) the date proposed under clause 27(3)(e) is no earlier than 30 business days and no later than 30 business days after the date on which the data change notice is processed by AEMO.
- h) the proposed amendment is to change the meter type under item 20(1)(g) of the AEMO Registry from an interval meter to a basic meter, that the non-temperature-sensitive base load and the temperature sensitivity heating rate for the delivery point are held within AEMO.

29 If data change notice is not valid

Upon receipt of a *data change notice* which is not valid, *AEMO* must *promptly*:

- a) reject the data change notice; and
- b) notify, by means of a notice, the person that lodged the data change notice, to indicate that the data change notice has been rejected, including the rejection reason.

{Note: A network operator wishing to reinitiate a *data change notice* that has been rejected must lodge a new *data change notice*.}

Notification format defined in [ICD: NOT-NOCHNG 'Notice of no change made to registry entity']

30 If data change notice is valid AEMO accepts data change transaction

Upon receipt of a valid *data change notice* lodged under clause 27(1)(a), *AEMO* must *forthwith* accept the *data change notice* and update the registry under clause 49.

{Note: After accepting a *data change notice* under this clause 30, the *data change transaction* is complete and AEMO must update the *AEMO registry* under clause 49.}

31 Multiple data change transactions

(1) Where the GRMS Operations staff determine that multiple data change transactions need to be handled as a bulk transaction AEMO will manage the process and consult with affected parties to ensure the process is done efficiently and determine the gas day upon which the multiple data change transactions will take effect;

(2) where the multiple data change transactions relate to an update under clause 31(1), the network operator must advise this by means of a bulk electronic file, containing at least the following information:

- (i) *MIRN*; and
- (ii) the effective start date of the values provided; and
- (iii) non-temperature-sensitive base load; and

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(iv) temperature sensitivity heating rate

Notification format defined in [ICD BLHR: Base load and heating rate]

(3) *The GRMS Operations staff* may deem it necessary, in consultation with affected parties, to *cancel any open transactions* which may be in progress for affected *delivery points*, and inform affected *participants*. Where a *transaction* has been initiated by means of *AseXML*, then notification from *AEMO* of the cancellation will also be by means of *AseXML*, otherwise, the cancellation will be by means of a *notice*, as follows:

Notification format defined in [ICD: DCN-CAN-NOTF 'Data Change Notice Cancelled Notification'].

Notification format defined in [ICD: ECNET-CAN-NOTF 'Error Correction Cancellation Notification']

Notification format defined in [ICD: DIS-CAN-NOTF 'Disconnection Cancelled Notification']

Notification format defined in [ICD: REC-CAN-NOTF 'Reconnection Cancelled Notification']

Notification format defined in [ICD: PR-CAN-NOTF 'Permanent Removal Cancelled Notification']

Notification format defined in [ICD: TFR-CAN-NOTF 'Transfer Cancellation Notification']

(4) Upon completing the multiple *data change transactions*:

the GRMS Operations staff must update *the AEMO Registry* accordingly, where changes shall take effect from the start of the *gas day* as determined by *the GRMS Operations staff* under clause 31(1), and provide the affected parties with at least the information contained in clause 53(1) for the affected *delivery points*.

Where the *data change transactions* relate to an update *the GRMS Operations staff* must update *the AEMO Registry* accordingly, where changes shall take effect from the start of the *gas day* as determined by *the GRMS Operations staff* and provide, in consultation with affected parties, the affected parties with *bulk AEMO standing data*.

Notification format defined in [ICD: PROV-BSD Provision of Bulk AEMO standing data].

32 Error Correction Notice

(1) If a *current user* becomes aware of an error or inaccuracy in an item of the *AEMO standing data* as the result of:

- a) lodging an incorrect transfer request with *AEMO* — the current user must forthwith notify the previous user of this fact. If the current user does not know the identity of the previous user then:

- (i) the current user must as soon as practicable notify GRMS Operating staff and request it to notify it of the identity of the previous User. The current User's request must include the following details:
 - A. the MIRN; and
 - B. the GBO identification of the participant lodging the notice; and
 - C. the date the *transfer request* was completed (being the *transfer day* on which the *transfer* was purported to have occurred).

Notification format defined in [ICD: REQPU 'Request for MIRN previous user']

- (ii) within one business day of receiving a notice under clause 32(1)(a)(i) the GRMS Operating Staff must confirm that:
 - D. the person lodging the notice is the current user;
 - E. the delivery point exists within the AEMO registry; and
 - F. a transfer was completed on the day referred to in the notice; and
- (iii) if GRMS Operating Staff is able to confirm these matters, notify the current user of the identity of the previous user; or if AEMO is not able to confirm the matters in clause 32(1)(a)(ii), then within one business day of receiving a notice under clause 32(1)(a)(i) AEMO must notify the current user.

Notification format defined in [ICD: REQPU-RESP 'Response to request for MIRN previous user']

- (iv) as soon as practicable after receiving a notice under 32(1)(a)(ii), the current user must notify the previous user that it has become aware of an error or inaccuracy in an item of GRMS Operating Staff standing data as a result of lodging an incorrect transfer request;
- b) the network operator having lodged an incorrect delivery point transaction with AEMO in respect of new connection confirmation notice or permanent removal confirmation notice — the current user must as soon as practicable notify the network operator of this fact.

- (2) If a previous user is notified under clause 32(1)(a) it may as soon as practicable lodge an error correction notice for the delivery point with AEMO.

Notification format defined in [ICD: ECNET 'Error Correction Notice']

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- (3) If a network operator becomes aware of an error or inaccuracy in an item of the AEMO standing data as the result of:
- being notified by the current user under clause 32(1)(b); or
 - a) lodging an incorrect delivery point transaction with AEMO in respect of new connection confirmation notice or permanent removal confirmation notice,
Notification format defined in [ICD: ECNND 'Error Correction Notice For New Connection and Permanent Removal']
 - b) then subject to clause 32(4), it must as soon as practicable lodge an error correction notice for the delivery point with AEMO.
- (4) Before a network operator lodges an error correction notice as a result of clause 32(3)(b), it must notify the current user that it intends to lodge such a notice.
- (5) A previous user or a network operator may only lodge an error correction notice in respect of an incorrect delivery point transaction.
- (6) An error correction notice must specify at least the following information:
- a) the MIRN; and
 - b) the GBO identification of the participant lodging the notice; and
 - c) the type of delivery point transaction that needs to be corrected; and
 - d) the date the delivery point transaction was completed, so that if the error correction notice relates to:
 - (i) an incorrect transfer, the transfer day on which the transfer was purported to have occurred; or
 - (ii) an incorrect new connection confirmation notice, the day on which the MIRN was purported to have become commissioned; or
 - (iii) an incorrect permanent removal confirmation notice, the day on which the MIRN was purported to have become deregistered.

33 Requirements for valid Error Correction Notice

Upon receipt of an error correction notice, AEMO must validate that the error correction notice is valid; an error correction notice is valid if:

- a) the delivery point exists within AEMO; and
- b) the specified delivery point transaction relates to one of the following:
 - (i) a new connection confirmation notice;
 - (ii) a transfer; or
 - (iii) a permanent removal confirmation notice.
- c) if the specified delivery point transaction relates to:

- (i) a transfer, and there is not, in relation to the delivery point, an open transaction, unless the open transaction is a reconnection confirmation notice or disconnection confirmation notice for which the effective date is the same as the effective date of the transfer day of the completed transfer; or
- (ii) a new connection confirmation notice or a permanent removal confirmation notice, that:
 - d) the specified delivery point transaction relates to the MIRN;
 - e) the specified delivery point transaction has been completed; and
 - f) the specified delivery point transaction relates to:
 - (i) a *transfer*, that:
 - A. the participant lodging the error correction notice is the previous user; and
 - B. a transfer occurred on the transfer day specified in the error correction notice; and
 - C. the delivery point's MIRN status is commissioned or decommissioned; and
 - D. is the most recently completed transaction in respect of the delivery point, unless the more recently completed transaction is a reconnection confirmation notice or disconnection confirmation notice for which the effective date is the same as the effective date of the transfer day of the completed transfer; or
 - (ii) a new connection confirmation notice or a removal confirmation notice that:
 - A. the participant lodging the notice is the network operator; and
 - B. the effective date of the change to the MIRN status recorded in the AEMO registry occurred on the date specified in the error correction notice; and
 - C. is the most recently completed transaction in respect of the delivery point as recorded in the AEMO registry; and
 - g) the participant lodging the notice has an active GBO identification; and
 - h) the completion date of the specified delivery point transaction is not more than 425 calendar days prior to the date on which the error correction notice is processed by AEMO

34 If the Error Correction Notice is not valid

Upon receipt of a error correction notice relating to a transfer which is not valid, AEMO must immediately:

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- a) reject the error correction notice; and
- b) acknowledge the participant that lodged the error correction notice, including a rejection reason.

{Note: A previous user or a network operator wishing to reinitiate an error correction notice that has been rejected must lodge a new error correction notice.}

Notification format defined in [ICD: ECNND-REJ 'Error Correction Notice For New Connection and Permanent Removal Rejected']

35 If the Error Correction Notice is valid

Upon receipt of a error correction notice which is valid, AEMO must:

- a) forthwith accept the error correction notice; and
- b) if the error correction notice relates to a transfer promptly notify:
 - (i) the previous user that the error correction notice has been accepted, which notice must provide at least the following information from the error correction notice:
 - A. the Market Operator Initiating Receipt Id which AEMO has assigned to this error correction transaction; and
 - B. the transfer day on which the transfer was purported to have occurred; and
 - C. the process time of the error correction notice;

Notification format defined in [ICD: ECNET-NOTF-PU 'Error Correction Notification for erroneous transfer to Previous User']

- (ii) notify, by means of AseXML, the network operator that the error correction notice has been accepted, providing at least the following information from the error correction notice:

Notification format defined in [ICD: ECNET-NOTF-NO 'Error Correction Notification for erroneous transfer to Network Operator']

- A. the MIRN; and
 - B. the GBO Identification of the previous user; and
 - C. the transfer day on which the transfer was purported to have occurred; and
 - D. the process time of the error correction notice; and
 - E. the Market Operator Initiating Receipt Id which AEMO has assigned to this error correction transaction; and

- (iii) notify, by means of *AseXML*, the *current user* that the *error correction notice* has been accepted, providing at least the following information from the *error correction notice*:

Notification format defined in [ICD: ECNET-NOTF-CU 'Error Correction Notification for erroneous transfer to Current User']

- A. the *MIRN*; and
 - B. the *transfer day* on which the *transfer* was purported to have occurred; and
 - C. the process time of the error correction notice; and
 - D. the Market Operator Initiating Receipt Id which AEMO has assigned to this error correction transaction.
- (iv) suspend the error correction transaction until the lapse of the error correction objection resolution period; or
- (v) otherwise, if the error correction notice relates to a new connection confirmation notice or a permanent removal confirmation notice, then AEMO must promptly notify, by means of a notice,
- A. the network operator that the error correction notice has been accepted; and
 - B. the current user that the error correction notice has been accepted, if the error correction notice relates to a new connection confirmation notice.

Notification format defined in [ICD: ECNND-CONF-NOTF 'Error Correction Notice For New Connection and Permanent Removal Confirmation Notification']

36 Error Correction Objection (in respect of an incorrect *transfer*)

(1) Before *close of business* at the expiry of 2 *full business days* after the *process time* notified under clause 35(b)(ii)D or or 35(b)(iii)C, a *network operator* or *current user* may lodge an *error correction objection* with AEMO by means of *AseXML*, on one or more of the following grounds:

- a) after making reasonable enquiries, the participant reasonably believes that the error correction notice contains incorrect information
- b) the participant reasonably believes that the delivery point transaction specified in the error correction notice is correct

Notification format defined in [ICD: ECNET-OBJ-NO 'Error Correction Objection by Network Operator']

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Notification format defined in [ICD: ECNET-OBJ-CU 'Error Correction Objection by Current User']

- (2) An *error correction objection* under this clause must specify at least the following information:
- a) Details of the error correction notice to which the error correction relates; and
 - b) The GBO-ID of the participant lodging the error correction objection; and
 - c) the ground of the participant's objection;
- (3) Upon receipt of the error correction objection, AEMO must validate that the error correction objection is valid. An error correction objection is only valid if:
- a) it corresponds to an open error correction notice lodged under clause 32(1), in respect of a correction to an incorrect transfer and on the same delivery point; and
 - b) it is lodged by the active network operator or current user, who has an active GBO identification (as applicable); and
 - c) the participant lodging the error correction objection is objecting on one or more of the grounds specified in clause 36(1); and
 - d) the error correction objection is received within the time period allowed, as defined in this clause, 36(1).

37 If an Error Correction Objection is not valid

Upon receipt of an *error correction objection* which is not valid, AEMO must *immediately*:

- a) reject the correction objection; and
- b) acknowledge the user that lodged the error correction objection, including a rejection reason.

38 If an Error Correction Objection is valid

Upon receipt of a valid error correction objection in respect of an erroneous transfer, AEMO must:

- a) forthwith accept the error correction objection; and
- b) promptly acknowledge the participant that lodged the error correction, the previous user, and the objecting participant, of the error correction objection, by means of AseXML.

Notification format defined in [ICD: ECNET-OBJ-NOTF-OP 'Error Correction Objection Notification to objecting participant']

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Notification format defined in [ICD: ECNET-OBJ-NOTF-PU 'Error Correction Objection Notification to previous user']

- (i) details of the error correction notice to which the error correction objection relates.
- (ii) the process time of the error correction objection

39 Withdrawal of Error Correction Objection

(1) Before *close of business* at the expiry of 3 full business days after the *process time* notified under clause 38(b)(ii), a *network operator* or *current user* that lodged an *error correction withdrawal notice* may lodge an *error correction objection withdrawal notice* with the Market Operator, by means of *AseXML*.

Notification format defined in [ICD: ECNET-WOB 'Error Correction Objection Withdrawal Notice']

- (2) An *error correction objection withdrawal notice* under this clause must specify at least the following information:
 - a) the GBO Identification of the participant lodging the error correction objection withdrawal notice; and
 - b) the Market Operator initiating Receipt Id which AEMO has assigned to this error correction transaction; and
 - c) the Market Operator Initiating Receipt Id which AEMO has assigned to this error correction objection.
- (3) Upon receipt of the error correction objection withdrawal notice, AEMO must validate that the error correction objection withdrawal is valid as follows:
 - a) the error correction objection withdrawal notice relates to an open error correction objection previously lodged by the participant under clause 36(1); and
 - b) the error correction objection withdrawal notice relates to an open error correction transaction; and
 - c) the participant lodging the notice has an active GBO identification; and
 - d) the error correction objection withdrawal notice is received within the time period allowed, as defined under clause 39(1).

40 If Error Correction Objection Withdrawal Notice is not valid

Upon receipt of an *error correction objection withdrawal notice* which is not valid, the *Market Operator* must *immediately*:

- a) reject the error correction objection withdrawal notice; and
- b) acknowledge the participant that lodged the error correction objection withdrawal notice, including a rejection reason.

41 If Error Correction Objection Withdrawal Notice is valid

Upon receipt of a valid *error correction objection withdrawal* in respect of an erroneous transfer, *AEMO* must:

- a) forthwith accept the error correction objection withdrawal notice; and
- b) forthwith acknowledge the participant that lodged the error correction objection withdrawal notice; and
- c) promptly cancel the error correction objection in *AEMO*; and notify the *previous user*, and the objecting *participant*, that the *error correction objection withdrawal notice* has been accepted, and the corresponding *error correction objection* has been withdrawn, by means of *AseXML*, which *notice* must provide at least details of the *error correction objection* to which the *error correction objection withdrawal* relates.

Notification format defined in [ICD: ECNET-WOB-NOTF-OP 'Error Correction Objection Withdrawal Notification to Objecting Participant']

Notification format defined in [ICD: ECNET-WOB-NOTF-PU 'Error Correction Objection Withdrawal Notification to Previous User']

Notification from *AEMO* must provide at least:

- a) the MIRN; and
- b) the Market Operator Initiating Receipt Id which *AEMO* has assigned to this error correction transaction; and
- c) the Market Operator Initiating Receipt Id which *AEMO* has assigned to this error correction objection;

42 Cancellation of Error Correction Transaction

If *AEMO* receives a valid *error correction objection* and does not receive a valid *error correction objection withdrawal notice* within the time period specified under clause 39(1), then *AEMO* must:

- a) forthwith cancel the error correction transaction; and
- b) promptly notify the network operator, current user and previous user that the error correction transaction has been cancelled, by means of *AseXML*.

Notification format defined in [ICD: ECNET-CAN-NOTF 'Error Correction Cancellation Notification']

43 Withdrawal of Error Correction Notice

(1) A *previous user* which has lodged an *error correction notice* in respect of an incorrect *transfer* may at any time before the *error correction transaction* is completed

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under clause 46, withdraw that *error correction notice*. An *error correction withdrawal notice* in respect of a *transfer* may be lodged, by means of *AseXML*, with *AEMO*.

Notification format defined in [ICD: ECNET-WDR 'Error Correction Withdrawal Notice']

- (2) A provision of this document permitting or requiring *AEMO* to *cancel an error correction transaction* does not limit the generality of clause 43(1).
- (3) An *error correction withdrawal notice* must specify at least the following information:
 - a) the Market Operator Initiating Receipt Id which *AEMO* has assigned to this error correction transaction;
 - b) the GBO identification of the previous user lodging the error correction withdrawal notice; and
- (4) An error correction withdrawal notice is valid only if it corresponds to an open error correction notice previously lodged by the previous user, who has an active GBO identification.

44 If Error Correction Withdrawal Notice is not valid

Upon receipt of an *error correction withdrawal notice* which is not valid, *AEMO* must *immediately*:

- a) reject the error correction withdrawal notice; and
- b) acknowledge the participant that lodged the error correction withdrawal notice, including a rejection reason.

45 If Error Correction Withdrawal Notice is valid

Upon receipt of a *error correction withdrawal notice* which is valid, *AEMO* must:

- a) forthwith accept the error correction withdrawal notice; and
- b) promptly acknowledge the participant that lodged the error correction withdrawal notice; and
- c) forthwith cancel the error correction transaction; and promptly notify the network operator, current user, and previous user that the error correction transaction has been cancelled, by means of *AseXML*.

Notification format defined in [ICD: ECNET-CAN-NOTF 'Error Correction Cancellation Notification']

46 AEMO to mark as pending and then complete Error Correction Transaction in respect of an incorrect transfer

- (1) If *AEMO*:

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- a) has accepted a valid error correction notice under clause 35(a) in respect of an incorrect transfer; and
- b) has not been notified of an error correction withdrawal notice under clause 43(1); and
- c) either:
 - (i) does not receive a valid *error correction objection*; or
 - (ii) receives a valid *error correction objection* and also a valid *error correction objection withdrawal notice*;

then AEMO must

- d) forthwith mark the error correction transaction as pending; and
- e) promptly notify the previous user, the network operator, and the current user by means of AseXML that the error correction transaction is pending:

Notification format defined in [ICD: ECNET-PEND-NOTF 'Error Correction Notice Confirmation Notification'].

(2) Upon notifying participants under clause 46(1)(e), AEMO must

- a) forthwith complete the error correction transaction; and
- b) promptly notify the previous user, the network operator, and the current user by means of AseXML that the error correction transaction has been completed:

Notification format defined in [ICD: ECNET-CONF-NOTF 'Error Correction Notice Confirmation Notification'].

{Note: If the *error correction transaction* is completed under this clause 46(2), then AEMO must update the AEMO Registry as defined under clause 50(a)}

47 When error correction transactions take effect

Unless this document states otherwise, an *error correction transaction* takes effect as from:

- a) in respect of a transfer — the start of the transfer day on which the transfer was purported to have occurred; and
- b) in respect of a new connection confirmation notice — the start of the gas day on which the MIRN was purported to have become commissioned; and
- c) in respect of a permanent removal confirmation notice — the start of the gas day on which the MIRN was purported to have become deregistered.

48 Network operator must provide metering data to new current user

No [BS] requirement. Refer to [RMP] for context only.

49 Updating the AEMO Registry after accepting a data change transaction

Upon accepting a *data change transaction* in relation to a *delivery point* under clause 30, AEMO will assess when the amendment to the *AEMO standing data* becomes effective, based on the date specified under clause 27(3)(e), (“**effective date**”). AEMO will make the update to the AEMO Registry either:

- a) forthwith, if the effective date of the data change notice is retrospective; or
- b) on the start of the gas day of the effective date, if the effective date is prospective.

{Note: This clause 49 does not apply to multiple *data change transactions* that are dealt with as a bulk transaction under clause 31(2).}

50 Updating the AEMO Registry after accepting an error correction transaction

AEMO must:

- a) upon accepting an error correction transaction in relation to:
 - (i) an incorrect new connection confirmation notice; or
 - (ii) an incorrect permanent removal confirmation notice,
 - (iii) for a delivery point under clause 35(a) - forthwith correct the relevant items of *AEMO standing data* in the AEMO Registry, to take effect from the start of the *gas day* specified in clause 47(b) or clause 47(c) (as applicable); and
- b) upon completing an error correction transaction in relation to an incorrect transfer – forthwith correct the relevant items of AEMO standing data in the AEMO Registry, to take effect from the start of the gas day specified in clause 47(a); and

51 Updating the AEMO Registry due to change in MIRN status

AEMO must:

- a) upon accepting a valid new connection confirmation notice under clause 69 forthwith:
 - (i) create a new record for the *delivery point*; and
 - (ii) record the delivery point’s MIRN status as *commissioned*; and
 - (iii) record *AEMO standing data* in the AEMO Registry including the items of the *AEMO standing data* provided by the *network operator*, and including for a basic metered delivery point, AEMO determining the small use indicator.

to take effect from the start of the *gas day* on which the *MIRN* became *commissioned* as notified to AEMO by the *network operator*; and

- b) upon accepting a valid disconnection confirmation notice under clause 116(1)(a) - forthwith record the MIRN status in the AEMO registry as decommissioned, to take effect from the start of the gas day on which the MIRN became decommissioned as notified to AEMO by the network operator; and
- c) upon accepting a valid reconnection confirmation notice under clause 124(1)(a) - forthwith record the MIRN status in the AEMO registry as commissioned, to take effect from the start of the gas day on which the MIRN became commissioned again as notified to AEMO by the network operator; and
- d) upon accepting a valid permanent removal confirmation notice under clause 132(a) - forthwith deregister the MIRN in the AEMO registry, to take effect from the start of the gas day on which the MIRN became deregistered as notified to AEMO by the network operator.

52 Updating the AEMO Registry due to a completed transfer or determination of a small use customer or small use customer indicator determination

AEMO must:

- a) record the incoming user in the AEMO Registry as the current user to take effect from the start of the transfer day:
 - (i) for a basic metered delivery point forthwith upon the receipt of a meter reading under clause 103(1)(b), or
 - (ii) for an interval metered delivery point from the start of the earliest transfer day.
- b) there is no clause 52(b).
- c) upon determining the small use customer indicator for the customer at a delivery point under clause 373B — within 1 business day record in the AEMO Registry the small use customer indicator, to take effect from the start of the gas day on which the determination was made by the data estimation entity and AEMO.

53 Provision of AEMO standing data

(1) Upon updating the AEMO registry under clause 49, 50(a)(ii), 51(b), 51(c), 51(d), or 52(c), AEMO must immediately notify the network operator, and the current user of at least the following information:

- a) the MIRN; and
- b) the updated item of AEMO standing data and the effective date of that data item; and
- c) the reason for the update to the item of AEMO standing data; and
- d) the last date of modification of the AEMO Registry for the MIRN; and

- e) the last person to initiate a modification to the AEMO Registry for the MIRN.

Notification format defined in [ICD: DSD 'Deliver Standing Data'].

- (2) Upon updating the AEMO registry under clause 50(b) or 52(a), AEMO must immediately:

- a) notify the network operator of at least the following information:
- (i) the *MIRN*; and
 - (ii) the updated item of *AEMO standing data* and the date that the change to the data item became effective; and
 - (iii) the reason for the update to the item of *AEMO standing data*; and
 - (iv) the *last date of modification* of the AEMO Registry for the *MIRN*; and
 - (v) the last person to initiate a modification to the AEMO Registry for the *MIRN*; and
- b) provide the current user with the AEMO standing data for the delivery point and the reason for the update to the AEMO standing data.

Notification format defined in [ICD: DSD 'Deliver Standing Data'].

- c) notify the previous user of at least the following information:
- (i) the *MIRN*; and
 - (ii) that the current user of the delivery point has changed; and
 - (iii) the reason for the update to the item of *AEMO standing data*; and
 - (iv) the last date of modification of the AEMO registry for the *MIRN*.

{Note: The transfer confirmation notice provided under clause 103(1)(d) also serves as the notice required under clause 53(2)(c) for updates to the registry under clause 52(a). For the avoidance of doubt this notice is only provided following the successful update of the AEMO registry.}

{Note: The error transaction completion notice provided under clause 46(2)(b) also serves as the notice required under clause 53(2)(c) for updates to the registry under clause 50(b). For the avoidance of doubt this notice is only provided following successful update of the AEMO registry.}

- (3) Upon updating the AEMO registry under clause 51(a), AEMO must immediately:

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- a) notify the network operator of at least the following information:
- (i) the MIRN; and
 - (ii) the details of the updated item of AEMO standing data; and
 - (iii) the reason for the update to the item of AEMO standing data; and
 - (iv) the last date of modification of the AEMO registry for the MIRN; and
 - (v) the last person to initiate a modification to the AEMO registry for the MIRN; and
- b) provide the current user with the AEMO standing data for the delivery point and the reason for the update to the item of AEMO standing data.

Notification format defined in [ICD: DSD 'Deliver Standing Data'].

The following table includes the details of those data items of Market Operator standing data to be included in the DSD 'Deliver Standing Data' transaction, with reference to each scenario in which it will be sent.

Business Process	Reference	RMR Reference	Recipient	(Item reference) Data Items to be included
Data Change	49	49	Current User or Network operator	<ul style="list-style-type: none"> • MIRN • N/A: MIRN checksum • item of changed data (e.g: gas zone) • last date of modification (e.g. gas zone 'effective date') • GBO Identification of the participant initiating the data change • N/A: change reason code
Error Correction in respect of incorrect new connection	50	50(a)(i)	Current User or Network operator	N/A. Standing data not delivered.
Error Correction in respect of incorrect permanent removal	50	50(a)(ii)	Current User or Network operator	<ul style="list-style-type: none"> • MIRN • N/A: MIRN checksum • MIRN status • last date of modification (effective date of the permanent removal being corrected) • GBO Identification of the participant initiating the error correction of permanent removal • N/A: change reason code
Error Correction in	50	50(b)	Current user	<ul style="list-style-type: none"> • MIRN • N/A: MIRN checksum

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respect of incorrect transfer				<ul style="list-style-type: none"> • MIRN status • first date on which the MIRN became commissioned • current user • ROLR • network operator • meter type • gas zone • Either: small use customer or small use customer indicator (as applicable) • non-temperature sensitive base load • temperature sensitivity heating rate • last date of modification (e.g. error correction 'effective date') • GBO Identification of the participant initiating the error correction • N/A: change reason code
Error Correction in respect of incorrect transfer	50	50	Network operator	<ul style="list-style-type: none"> • MIRN • N/A: MIRN checksum • current user • last date of modification (i.e. error correction 'effective date') • GBO Identification of the participant initiating the error correction • N/A: change reason code
New Connection	51	51	Current user	<ul style="list-style-type: none"> • MIRN • N/A: MIRN checksum • MIRN status • first date on which the MIRN became commissioned • current user • ROLR • network operator • meter type • gas zone • Either small use customer or small use customer indicator (as applicable) • non-temperature sensitive base load • temperature sensitivity heating rate • last date of modification (e.g. new connection 'effective date') • GBO Identification of the participant initiating the new connection • N/A: change reason code
New Connection	51	51	Network operator	<ul style="list-style-type: none"> • MIRN • N/A: MIRN checksum • MIRN status • first date on which the MIRN became commissioned

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				<ul style="list-style-type: none"> • last date of modification (i.e. new connection ‘effective date’) • GBO Identification of the participant initiating the new connection • N/A: change reason code
Change to MIRN status (disconnection, reconnection, permanent removal)	51	51	Current user/ Network operator	<ul style="list-style-type: none"> • MIRN • N/A: MIRN checksum • MIRN status • last date of modification (i.e. MIRN status ‘effective date’) • GBO Identification of the participant initiating the change in MIRN status • N/A: change reason code
Transfer	52	52(a)	Current user	<ul style="list-style-type: none"> • MIRN • N/A: MIRN checksum • MIRN status • first date on which the MIRN became commissioned • current user • ROLR • network operator • meter type • gas zone • Either small use customer or small use customer indicator (as applicable) • non-temperature sensitive base load • temperature sensitivity heating rate • last date of modification (e.g. transfer ‘effective date’) • GBO Identification of the participant initiating the transfer • N/A: change reason code
Transfer	52	52(a)	Network operator	<ul style="list-style-type: none"> • MIRN • N/A: MIRN checksum • : current user • last date of modification (i.e. transfer ‘effective date’) • GBO Identification of the participant initiating the transfer • N/A: change reason code
Small Use Customer Determination	52(b)	52(b)	Current user/ Network operator	<ul style="list-style-type: none"> • MIRN • N/A: MIRN checksum • last date of modification (i.e. small use customer effective date (small use customer indicator effective date • GBO Identification of the participant initiating the change (i.e. AEMO’s GBO identification) • N/A: change reason code

Part 2.3 Retention of and access to historical data in the AEMO Registry

54 The registry to provide audit trail

(1) The GRMS Operations staff must ensure that AEMO retains a full change history, such that it can be recreated for a delivery point as at the beginning of the gas day in the relevant jurisdiction, for any date in the preceding 7 years or (if the data made available to AEMO covers less than 7 years) for as many years as there is AEMO standing data in the AEMO Registry for the delivery point.

(2) The change history maintained under this clause 54(1) must for any change to the *AEMO standing data* for a delivery point made in the preceding 7 years, or for as many years as there is *AEMO standing data* available, permit the identification of:

- a) the date on which the change occurred; and
- b) the identity of the person who initiated or requested the change.

55 Accessibility of data in the AEMO Registry

The GRMS Operations staff must maintain or archive the previous AEMO standing data for each delivery point identified in AEMO:

- a) in a readily accessible format for at least 2 years after the date on which a delivery point is deregistered; and
- b) after that for at least a further 5 years in a format accessible by AEMO within 5 business days.

55A Explicit informed consent required:

(1) Before lodging a request with the GRMS Operations staff for historical AEMO standing data for a delivery point that relates to a period for which the user was not the current user, a user must obtain the customer's explicit informed consent to the receipt by the user of the requested data.

Note: The *user* should ensure that the *customer's* consent extends to all actions the *user* may need to undertake to complete the request for the *historical AEMO standing data*.

(2) If at any time before GRMS Operations staff have provided information to a user under clause 57(2), a customer's explicit informed consent under clause 55A(1) ceases to apply (for example because it is withdrawn), then the user must withdraw the request to the extent that the request relied upon the customer's explicit informed consent.

(3) If at any time after GRMS Operations staff have provided information to a user under clause 57(2), a customer's explicit informed consent under clause 55A(1) ceases to apply (for example because it is withdrawn), then the user must not use the information for any purpose and must to the extent reasonably practicable delete all copies of the information.

56 Request for historical AEMO standing data

(1) Subject to clause 56(2), a user or a network operator may lodge, by means of a notice, a historical AEMO standing data request with the GRMS Operations staff in respect of a delivery point.

Notification format defined in [ICD: REQ-HSD 'Historical AEMO standing data request']

(2) By lodging an historical AEMO standing data request with the GRMS Operations staff under clause 56(1), the user represents and warrants to AEMO that either:

- a) the historical AEMO standing data requested by the user only relates to a period for which the user was the current user; or
- b) that the user has complied with clause 55A(1).

(3) The *user* makes the warranty in this clause 56(2) anew on each day that an historical *AEMO standing data* request is open.

(4) An historical AEMO standing data request must specify at least the following information:

- a) the MIRN; and
- b) the GBO identification of the participant lodging the request; and
- c) the start date and end date of the period to which the request relates; and
- d) the historical AEMO standing data requested.

(5) The *GRMS Operations staff* may, by having regard to the number of historical *AEMO standing data* requests it receives, and in consultation with *AEMO*, impose a daily limit on the number of historical *AEMO standing data* requests that a *participant* may lodge under clause 56(1) for a fixed or indefinite period.

57 AEMO to provide historical AEMO standing data

(1) Upon receipt of an historical AEMO standing data request under clause 56(1), the GRMS Operations staff must:

- a) confirm that the participant has an active GBO identification within AEMO for the date on which the data is extracted; and
- b) if the historical AEMO standing data request was made by a network operator, confirm that the network operator is recorded in AEMO as the network operator for that delivery point.

(2) Upon confirming the matters in clause 57(1), and provided that the participant has not withdrawn the request under clause 57(4), the GRMS Operations staff must provide, by means of a bulk electronic file, the historical AEMO standing data (as requested) to the participant that lodged the historical AEMO standing data request:

- c) within 1 business day, if the historical AEMO standing data requested is less than 2 years old; or

- d) within 5 business days, if the historical AEMO standing data requested is between 2 and 7 years old.

Notification format defined in [ICD: PROV-HSD 'Provision of historical AEMO standing data']

- (3) If AEMO was unable to confirm any or all of the matters in clause 57(1), AEMO must within 1 business day of receiving the historical AEMO standing data request:

- a) (a) reject the historical AEMO standing data request; and
b) (b) notify the participant that lodged the historical AEMO standing data request that the historical AEMO standing data request has been rejected and provide the reason why the historical AEMO standing data request has been rejected.

- (4) A participant may at any time before receiving the requested historical AEMO standing data under clause 57(2), withdraw the request made under clause 56(1) by notifying AEMO. reject the historical AEMO standing data request; and

Notification format defined in [ICD: WDR-HSD 'Withdraw historical AEMO standing data request']

Part 2.4 A network operator's databases

58 MIRN database

No [BS] requirement. Refer to [RMP] for context only.

59 Street/suburb table

No [BS] requirement. Refer to [RMP] for context only.

60 MSD database

No [BS] requirement. Refer to [RMP] for context only.

61 Users and the Market Operator must assist a network operator to keep network operator's databases accurate

(1) Neither a user nor the GRMS Operations staff may knowingly permit any or all of a network operator's MIRN database, street/suburb table or MSD database to be materially inaccurate.

(2) A user or the GRMS Operations staff may discharge their respective duties under this clause by as soon as practicable notifying, by means of a notice, the network operator of a proposed amendment to one of the network operator's databases together with details of why it is necessary, within 2 business days after becoming aware of a need to change information stored in the MIRN database or MSD database.

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Notification format defined in [ICD: NOT-NODB 'Notice of change required in network operator databases]

- (3) Upon receipt of a notification under this clause, a *network operator* must determine whether a change is required to one of its databases, and if it determines that no change is necessary it must within 5 *business days* notify the *user* or *AEMO* (as applicable) of its determination and its reasons.

Notification format defined in [ICD: NOT-NODB-NOCHNG 'Notice of no change made to network operator databases]

Following receipt of the above notice, if the GRMS Operations staff determine that a data inconsistency may still exist, then this must be resolved in consultation with AEMO.

62 Updating MIRN database and MSD database

(1) A network operator must, in accordance with this clause 62, ensure that the information stored in its *MIRN database* and its *MSD database* is accurate.

(2) Clause 62(1) does not require a network operator to undertake any investigation in respect of the items referred to in clauses 62(1)(i) and 62(1)(j), but this clause 62(2) does not limit the network operator's obligations under clause 61(3) if it is notified under clause 61(2) of a necessary change to either of those items.

(3) Upon updating its *MIRN database* and *MSD database*, except as a result of undertaking a disconnection under clause 105(1)(c) or a reconnection under clause 117(1)(c), a network operator must promptly provide at least the updated item of *MIRN standing data* or *meter standing data* (as applicable) for a delivery point to the current user.

{Note that the network operator will if necessary also raise a data change notice with AEMO, under clause 27(1), if a change is made to the gas zone or meter type, or if the delivery point is no longer in the network operator's GDS}.

3. MIRN Transactions

Part 3.1 New Connection

63 Allocating MIRNs to network operators

(1) Subject to clause 63(2), *AEMO* must, in consultation with the *network operator*, assign a range of *MIRNs* to a newly registered *network operator* at the time of notifying the *network operator* of its *GBO identification* under clause 22(2)(b).

(2) *AEMO* must not assign the same range of *MIRNs* to more than one *network operator*.

64 Allocating a MIRN to a delivery point

(1) Upon installing a *meter* at a *new connection*, a *network operator* must, if it has not done so already:

- a) assign a *MIRN* to the delivery point within the range and format as allocated to the *network operator* by *AEMO* under clause 63; and
- b) determine a *MIRN* checksum for the *MIRN* in accordance with the standard algorithm as set out in this document.

(2) A *network operator*:

- a) must not assign the same *MIRN* to more than one delivery point; and
- b) must not re-use a *MIRN* that related to a previously deregistered delivery point.

65 MIRNs becoming commissioned for the first time

(1) A *network operator* has commissioned a *delivery point* when:

- a) a *meter* has been installed and commissioned at the delivery point; and
- b) gas is able to flow at the delivery point; and
- c) the *meter reading data* has been obtained for the delivery point.

(2) Upon first commissioning a *delivery point*, a *network operator* must:

- a) promptly notify the user that the installation of the *meter* at the delivery point is complete and notify the user of:
 - (i) subject to clause 65(3), the *MIRN standing data*; and
 - (ii) for a *basic-metered delivery point* only, the *meter standing data* assigned to the *delivery point*; and
 - (iii) the *metering data* in accordance with this document as if the user were an *incoming user*; and

- b) promptly lodge a new connection confirmation notice with AEMO, by means of AseXML:

Notification format defined in [ICD: COM-DP 'Commissioning of Delivery Point']

(3) Until such time as the network operator gives notice to AEMO under this clause 65(3)(which notice AEMO must forward to all users), the network operator is not required to provide the MIRN standing data under clause 65(2)(a)(i) until requested by the incoming user (and to avoid doubt the request, if made, is not a MIRN discovery request that requires a customer's explicit informed consent).

66 New connection confirmation notice

A new connection confirmation notice must specify at least the following data:

- a) the MIRN assigned to the delivery point; and
- b) the GBO identification of the network operator lodging the new connection confirmation notice; and
- c) the date on which the MIRN became commissioned; and
- d) the data for all those items of the AEMO standing data for which the network operator is the source under clause 20(1); and
- e) there is no clause 66(e); and
- f) if the delivery point is basic metered — the non-temperature-sensitive base load and the temperature sensitivity heating rate, for the delivery point.

67 Requirements for valid new connection confirmation notice

A new connection confirmation notice is valid only if:

- a) the MIRN does not already exist in the AEMO registry; and
- b) it is lodged by the network operator who has an active GBO identification; and
- c) the user nominated by the network operator as the current user for item 20(1)(d) of the AEMO standing data, has an active GBO identification; and
- d) the date on which the notice is received is on or after the date on which the MIRN became commissioned; and
- e) the meter type is either a basic meter or an interval meter; and
- f) the gas zone exists in the AEMO registry;
- g) the notice sets out information for the purposes of clause 66(f); and
- h) the user has a contract with a shipper for the haulage of gas to the network section that the delivery point is located in provided that network section appears in the shipper register under clause 173

68 If new connection confirmation notice is not valid

Upon receipt of a *new connection confirmation notice* which is not valid, then *AEMO* must *immediately*:

- a) reject the new connection confirmation notice
- b) acknowledge the network operator that the new connection confirmation notice has been rejected and provide the reason for rejection

Note that the *MIRN* will not be created in *AEMO*. If the *network operator* wishes to resubmit the *transaction*, a new the *new connection confirmation notice* will need to be sent to *AEMO*

69 If new connection confirmation notice is valid

Upon receipt of a valid *new connection confirmation notice* lodged under clause 65(2)(b), then *AEMO* must:

- a) forthwith accept the new connection notice, and update the *AEMO* Registry under clause 51(a); and
- b) promptly acknowledge the network operator that the new connection confirmation notice has been accepted; and
- c) promptly notify the network operator and the current user, of the standing data for the delivery point, by means of AseXML,

Notification format defined in [ICD: DSD ‘Deliver standing data’]

{Note: The user is responsible for all transportation and haulage charges to and all gas withdrawals from the delivery point from the beginning of date on which the MIRN became commissioned.}

Part 3.2 MIRN Discovery

70 Purpose of MIRN discovery process

No [BS] requirement. Refer to [RMP] for context only.

71 There is no clause 71

No [BS] requirement. Refer to [RMP] for context only.

72 There is no clause 72

No [BS] requirement. Refer to [RMP] for context only.

73 There is no clause 73

74 The MIRN discovery request

No [BS] requirement. Refer to [RMP] for context only.

74A Complete MIRN Listing

No [BS] requirement. Refer to [RMP] for context only.

75 Network operator to respond to MIRN discovery request

No [BS] requirement. Refer to [RMP] for context only.

76 Network operator to assist

No [BS] requirement. Refer to [RMP] for context only.

Part 3.3 Transfer

This Part 3.3 deals with the transfer of *customers* from one *user (current user)* to another *user (incoming user)*. However, in legal terms this is achieved by transferring *gas deliveries* at a *delivery point* from the *current user* to the *incoming user*.

77 Transfer errors

(1) If, due to a transfer error or otherwise, the wrong user is recorded in AEMO as the current user for a delivery point, then GRMS Operations and the affected users must cooperate to correct this error by either:

- a) a user lodging an error correction notice under clause 32(2); or
- b) a user lodging a new transfer request in respect of the delivery point and entering into an agreement under clause 77(2), but to avoid doubt the correcting transfer must have only prospective effect.

(2) Subject to participants' obligations under clause 32 to lodge an error correction notice in respect of an incorrect transfer request, participants may enter into agreements if they cannot meet the requirements under clause 33 to lodge a valid error correction notice, to address or correct transfers which should have occurred but did not, or which occurred but should not have, or were otherwise in error (in this clause collectively "transfer errors").

Note: The purpose of clause 77(2) is to permit "off-market" correcting *transactions*. For example, if the *transfer day* is in error.

(3) AEMO and all involved participants to an agreement under clause 77(2) must provide such information in accordance with this document as is required to facilitate the agreement.

78 Move in defined

A "move in" occurs when:

- a) a small use customer commences occupation of a premises; and

- b) there is an associated change of user for the delivery point which supplies gas to the premises.

79 Explicit informed consent

(1) Before lodging a transfer request with AEMO, an incoming user must obtain the transferring customer's explicit informed consent to the lodgement.

(2) By lodging a transfer request with AEMO, the incoming user represents and warrants to AEMO that the incoming user has complied with clause 79(1).

(3) The incoming user makes the warranty in clause 79(2) anew on each day that a requested transfer is open.

(4) If, at any time before the transfer takes effect under clause 103(1)(c), a transferring customer's explicit informed consent ceases to apply (for example because it is withdrawn), then the incoming user must withdraw the transfer request under clause 95.

(5) This clause 79 does not apply where the incoming user is a self-contracting user.

80 Incoming user may lodge a transfer request

(1) Subject to clause 79 and clause 80(2), an incoming user may lodge a transfer request, by means of AseXML, with AEMO on any day

Notification format defined in [ICD: TFR-REQ 'Transfer Request']

(2) An incoming user that is a self-contracting user may only lodge a transfer request in respect of a delivery point at which it is the customer.

(3) By lodging a transfer request with AEMO, the self-contracting user represents and warrants to AEMO that the self-contracting user is the customer for the delivery point to which the transfer request relates.

81 Transfer request

(1) A transfer request which is lodged with AEMO must specify at least the following information:

- a) the MIRN; and
- b) the incoming user's GBO identification; and
- c) the earliest transfer day; and

{Note: Unless a *special meter reading* is requested for a *basic-metered delivery point*, the *transfer* of a *basic-metered delivery point* will take effect under clause 103(1)(c) at the time of the next *scheduled meter reading* which occurs on or after the *earliest transfer day*, provided an *actual value* is generated at that time.}

{Note: Under clause 83(i), an *earliest transfer day* must be no earlier than 5 *business days* after the date on which the *transfer request* is lodged (except where the *requested transfer* is a *move in*) and within the *allowable period*.}

{Note: For a *move in*, the transfer will take effect on the *move in date* or if there is no deemed meter reading or a *special meter reading* cannot be obtained on the *move in date*, it will take effect at the time a *special meter reading* is obtained under clause 99.}

d) whether the requested transfer is a move in

(2) By lodging a transfer request that is specified to be a move in, an incoming user represents and warrants to AEMO that the transfer request relates to a move in.

(3) An incoming user makes the warranty in clause 81(2) anew on each day that a requested transfer that is specified to be a move in is open.

(4) If a transfer request specifies that a requested transfer is a move in, and at any time before registration of the requested transfer under clause 52(a) the incoming user becomes aware that the requested transfer is not a move in, then the incoming user must withdraw the transfer request under clause 95.

(5) The network operator must:

- a) use the unique identifier assigned by AEMO to each transfer request as the service order reference for the purposes of clauses 105(3)(b)(i) and 117(1)(c); and
- b) include the unique identifier on any invoice or other transaction sent to the incoming user in connection with the transfer request.

Note that the *network operator* might be entitled to bill a *customer* in connection with a deemed request under clause 82.

82 Transfer request deemed to be a request for certain purposes

No [BS] requirement. Refer to [RMP] for context only.

83 Requirements for valid transfer request

A *transfer request* is valid only if:

- a) the delivery point exists within the AEMO registry; and
- b) the MIRN status is commissioned or decommissioned; and
- c) there is not, in relation to the delivery point, an open transfer request; and
- d) there is not, in relation to the delivery point, an open error correction transaction; and
- e) the incoming user is a user and has an active GBO identification; and
- f) except in the case of a ROLR event — the incoming user is not the ROLR; and
- g) if the requested transfer is a move in, the small use customer indicator indicates that the customer consumes less than 1 terajoule of gas per year; and -

{Note: AEMO determines the *small use customer indicator* under clause 373B.}

- h) if the requested transfer is a move in — the delivery point is basic-metered; and
- i) the earliest transfer day is within the allowable period and:
 - (i) if the requested transfer is not a move in — no earlier than 5 business days after the date on which the transfer request is lodged; and
 - (ii) if the requested transfer is a move in — no earlier than the date on which the notice is lodged.
- j) the user has a contract with a shipper for the haulage of gas to the network section that the delivery point is located in provided that network section appears in the shipper register under clause 173.

84 If transfer request is not valid

Upon receipt of a *transfer request* which is not valid, *AEMO* must *immediately*:

- a) reject the transfer request; and
- b) acknowledge the incoming user to indicate that the transfer request has been rejected and provide the rejection reason.

85 If transfer request is valid

(1) Upon receipt of a valid transfer request, *AEMO* must:

- a) forthwith accept the transfer request, and mark that transfer request as 'requested' within *AEMO*; and
- b) immediately acknowledge the incoming user to indicate that the transfer request has been accepted; and

immediately notify the incoming user, by means of AseXML, that the transfer request has been accepted:

Notification format defined in [ICD: TFR-NOTF-IU 'Transfer Request Notification to Incoming user']

The *transfer request* notification must provide at least the following details:

- (i) the *process time* of the *transfer request*; and
 - (ii) the *Market Operator Initiating Receipt Id* of the *transfer request*.
- c) immediately notify, by means of AseXML, the network operator that the transfer request has been accepted:

Notification format defined in [ICD: TFR-NOTF-NO 'Transfer Request Notification to Network Operator']

The *transfer request* notification must provide at least the following details:

- (i) the *MIRN*; and
 - (ii) the *GBO identification* of the *incoming user*; and
 - (iii) the *earliest transfer day*; and
 - (iv) whether the *requested transfer* is a *move in*; and
 - (v) the *process time* of the *transfer request*; and
 - (vi) the *Market Operator Initiating Receipt Id* of the *transfer request*.
- d) immediately notify, by means of AseXML, the current user that the transfer request has been accepted:

Notification format defined in [ICD: TFR-NOTF-CU 'Transfer Request Notification to Current User']

The *transfer request* notification must provide at least the following details from the *transfer request*:

- (i) the *MIRN*; and
 - (ii) the *earliest transfer day*; and
 - (iii) whether the requested transfer is a *move in*; and
 - (iv) the *process time* of the *transfer request*; and
 - (v) the *Market Operator Initiating Receipt Id* of the *transfer request*; and
- e) if the requested transfer is not a *move in*, immediately suspend the requested transfer until lapse of the transfer objection resolution period.

(2) AEMO will not notify the current user of the identity of an incoming user, however AEMO may do so where it judges, in its absolute discretion, that it is necessary to do so for the purpose of resolving any issue or dispute.

(3) AEMO may also, in its absolute discretion, for the purpose of resolving any issue or dispute in relation to the transfer request, provide the incoming user with any information AEMO receives from the current user in relation to the transfer request.

(4) For the purposes of clause 85(3), AEMO must provide the incoming user with the information AEMO receives, in the same format as AEMO received the information from the current user, provided that it is a format contemplated by these Procedures.

{Note: For example, if AEMO receives the information in AseXML format then AEMO must forward the information in AseXML format to the incoming user, and if AEMO receives the information in an email, then AEMO must forward the information in an email.}

Notification format defined in [ICD: TFR-ALERT-CU 'Transfer Change Alert']

Notification format defined in [ICD: TFR-ALERT-IU 'Transfer Change Alert to Incoming User']

86 Network operator may object to a transfer other than a move in

(1) Before close of business at the expiry of 2 full business days after the process time notified under clause 85(1)(c)(v), if the requested transfer is not a move in, a network operator may lodge a transfer objection with AEMO on the ground that the incoming user has not entered into a haulage contract in respect of the delivery point and its metering equipment with the network operator.

A transfer objection must be lodged with AEMO by means of AseXML:

Notification format defined in [ICD: TFR-OBJ-NO 'Transfer Objection by Network Operator']

(2) A transfer objection under this clause must specify at least the following information:

- a) the *GBO identification* of the *network operator* lodging the *transfer objection*; and
- b) the Market Operator Initiating Receipt Id of the transfer request transaction that it is objecting to, notified.

87 There is no clause 87

88 Requirements for a valid transfer objection

Upon receipt of a valid *transfer objection*, *AEMO* must validate that:

- a) the transfer objection corresponds to an open transfer request; and
- b) the transfer objection is lodged by either:
- c) the network operator, who has an active GBO identification; or
- d) the transfer objection is lodged within the time period allowed under clause 86(1) as applicable; and
- e) the network operator is objecting on the ground specified in clause 86(1); and
- f) the requested transfer is not a move in.

89 If transfer objection is not valid

Upon receipt of a *transfer objection* which is not valid, *AEMO* must *immediately*:

- a) reject the transfer objection; and
- b) acknowledge the participant that lodged the transfer objection to indicate that the transfer objection has been rejected, and provide the rejection reason.

90 If transfer objection is valid

Upon receipt of a valid *transfer objection*, *AEMO* must:

- a) forthwith accept the transfer objection; and
- b) immediately acknowledge the participant that lodged the transfer objection, to indicate that the transfer objection has been accepted
- c) immediately notify, by means of AseXML, the incoming user and the participant that lodged the transfer objection that the transfer objection has been accepted.

Notification format defined in [ICD: TFR-OBJ-NOTF-OP 'Transfer Objection Notification to Objecting Participant']

Notification format defined in [ICD: TFR-OBJ-NOTF-IU 'Transfer Objection Notification to Incoming User']

The *transfer objection notification* from *AEMO* must specify at least the following information:

- (i) the *Market Operator Initiating Receipt Id* of the *transfer request* to which the *transfer objection* relates; and
- (ii) the *Market Operator Initiating Receipt Id* of this *transfer objection*; and
- (iii) the *process time* of this *transfer objection*.

91 Withdrawal of transfer objection

(1) Before close of business at the expiry of 3 full business days after the process time notified under clause 90(b)(ii), a participant that lodged a transfer objection may lodge a transfer objection withdrawal notice with AEMO.

(2) A transfer objection withdrawal notice must be lodged with AEMO by means of AseXML, and must specify at least the following information::

- a) the GBO identification of the participant lodging the transfer objection withdrawal notice; and
- b) the Market Operator Initiating Receipt Id of the transfer request; and
- c) the Market Operator Initiating Receipt Id of the transfer objection;

Notice format defined in [ICD: TFR-WOBJ 'Transfer Objection Withdrawal']

(3) A transfer objection withdrawal notice lodged by a participant is valid only if:

- a) it corresponds to both:
 - (i) an *open transfer notice*; and

- (ii) an *open transfer objection* previously lodged by the *participant*, who has an *active GBO identification*; and
- (2) it is lodged within the time period allowed under clause 91(1).

92 If transfer objection withdrawal is not valid

Upon receipt of a *transfer objection withdrawal notice* which is not valid, *AEMO* must *immediately*:

- a) reject the transfer objection withdrawal notice; and
- b) acknowledge the participant that lodged the transfer objection withdrawal notice to indicate that the transfer objection withdrawal notice has been rejected and the rejection reason.

93 If transfer objection withdrawal is valid

Upon receipt of a valid transfer objection withdrawal notice, *AEMO* must:

- a) forthwith accept the transfer objection withdrawal notice; and
- b) forthwith cancel the transfer objection; and
- c) immediately acknowledge the participant that lodged the transfer objection withdrawal notice that the transfer objection withdrawal notice has been accepted; and
- d) immediately notify, by means of AseXML, the incoming user and the participant that lodged the transfer objection withdrawal notice that the transfer objection withdrawal notice has been accepted and the corresponding the transfer objection has been withdrawn, which notice must provide at least the details of the transfer objection to which the transfer objection withdrawal notice relates.

Notification format defined in [ICD: TFR-WOB-NOTF-OP 'Transfer Objection Withdrawal Notification to Objecting Participant']

Notification format defined in [ICD: TFR-WOB-NOTF-IU 'Transfer Objection Withdrawal Notification to Incoming User']

94 If transfer objection not withdrawn

If *AEMO*:

- a) receives a valid transfer objection and
- b) does not receive a valid transfer objection withdrawal notice within the time period specified under clause 91(1),

then *AEMO* must:

- c) before the start of the next business day, cancel the requested transfer; then
- d) promptly notify, by means of AseXML, the incoming user, the current user and the network operator that the requested transfer has been cancelled.

Notification format defined in [ICD: TFR-CAN-NOTF 'Transfer Cancellation Notification']

Division 3.3.4 – Withdrawal of Transfer Request

95 Incoming user may withdraw a transfer request

(1) An incoming user may withdraw a transfer request for a basic metered delivery point, by means of AseXML, at any time before AEMO issues a transfer confirmation under clause 103(1)(d)(i) by lodging a transfer withdrawal notice with AEMO.

Notification format defined in [ICD: TFR-WREQ 'Transfer Withdrawal Notice']

(2) An incoming user may withdraw a transfer request for a interval metered delivery point at any time up to two business days before the earliest transfer day notified in the pending notification by lodging a transfer withdrawal notice with AEMO.

(3) A provision of this document permitting or requiring the incoming user to withdraw, or AEMO to cancel, a transfer request does not limit the generality of clauses 95(1) and 95(2).

(4) A transfer withdrawal notice must specify at least the following information:

- a) the GBO identification of the incoming user lodging the transfer withdrawal notice; and
- b) the Market Operator Initiating Receipt Id of the transfer request;

(5) A transfer withdrawal notice is valid only if it corresponds to an open transfer request previously lodged by the incoming user, who has an active GBO identification.

96 If transfer withdrawal notice is not valid

Upon receipt of a *transfer withdrawal notice* which is not valid, *AEMO* must *immediately*:

- a) reject the transfer withdrawal notice; and
- b) acknowledge the participant that lodged the transfer withdrawal notice to indicate that the transfer withdrawal notice has been rejected and provide the rejection reason.

97 If transfer withdrawal notice is valid

Upon receipt of a valid *transfer withdrawal notice*, *AEMO* must:

- a) forthwith accept the transfer withdrawal notice; and

- b) forthwith cancel the requested transfer; and
- c) immediately acknowledge the incoming user to indicate that the transfer withdrawal notice has been accepted
- d) immediately notify, by means of AseXML, the current user, the incoming user and the network operator that the transfer withdrawal notice has been accepted and that the requested transfer has been cancelled.

Notification format defined in [ICD: TFR-CAN-NOTF 'Transfer Cancellation Notification']

98 Marking a move in as pending

If:

- a) AEMO receives a valid transfer request; and
- b) the requested transfer is a move in,

then *AEMO* must:

- c) mark the move in as pending; and
- d) immediately notify, by means of AseXML, the incoming user, the current user and the network operator that the move in is pending.

Notification format defined in [ICD: TFR-PEND-MI-NOTF 'Transfer Pending Notification for move-in']

99 Network operator may be required to undertake special meter reading for a move in

(1) If a requested transfer is a move in, and:

- a) the network operator determines as a reasonable and prudent person that there is no prospect of determining a deemed meter reading under clause 148(1)(a), for the earliest transfer day; and
- b) no scheduled meter reading is scheduled for the earliest transfer day; and
- c) no special meter reading has been requested (at least 2 business days prior to the earliest transfer day) by the user, for the earliest transfer day, then, the *network operator* must undertake a *special meter reading*:
- d) on the earliest transfer day; or
- e) if the earliest transfer day is less than 2 business days after AEMO gives notice under clause 98(d) that the transfer is pending — within 2 business days after receipt of the notice.

(2) If a requested transfer is a move in and either:

- a) a scheduled meter reading is scheduled for, or not more than 10 days before, the earliest transfer day; or

- b) a special meter reading has been requested (at least 2 business days prior to the earliest transfer day) for, or not more than 10 days before, the earliest transfer day by either:
 - (i) the current user; or
 - (ii) the incoming user; or
- c) the network operator is required to undertake a special meter reading under clauses 99(1)(d) or 99(1)(e);

and the *network operator* fails to obtain a *meter reading* under any one of the clauses 99(2)(a), 99(2)(b)(i), 99(2)(b)(ii) 99(2)(c) , then, the *network operator* must *promptly notify* the *incoming user* of the failure.

(3) If within 3 business days after notifying the incoming user under clause 99(2) the network operator receives a request from the incoming user to undertake a special meter reading , the network operator must undertake as soon as practicable a special meter reading for the delivery point the subject of the requested transfer under clause 99(1).

(4) If AEMO does not receive a metering data under clause 158 that contains an actual value or a substituted value within 7 business days of the earliest transfer day, then AEMO must:

- a) forthwith cancel the requested transfer within AEMO; and
- b) immediately notify, by means of AseXML, the incoming user, the current user and the network operator that the requested transfer has been cancelled.

Notification format defined in [ICD: TFR-CAN-NOTF 'Transfer Cancellation Notification']

100 Marking a transfer other than a move in as pending

(1) This clause 100 applies if:

- a) AEMO receives a valid transfer request; and
- b) the requested transfer is not a move in.

(2) If AEMO:

- a) does not receive a valid transfer objection; or
- b) receives a valid transfer objection and also a valid transfer objection withdrawal notice,

then AEMO must upon the lapse of the transfer objection resolution period:

- a) forthwith mark the requested transfer as pending; and
- b) immediately notify, by means of AseXML, the incoming user, the current user and the network operator that the requested transfer is pending.

Notification format defined in [ICD: TFR-PEND-NOTF 'Transfer Pending Notification']

101 Transfer for basic metered delivery point requires meter reading that has generated an actual value

(1) If a requested transfer for basic metered delivery point (which for the avoidance of doubt, is or is not a move in) is pending and AEMO receives metering data under clause 158 that contains an estimated value, AEMO must, within 24 hours, notify, by means of AseXML, the incoming user and current user that the requested transfer cannot take place until AEMO receives an actual value for the delivery point.

Notification format defined in [ICD: TFR-MAR-NOTF 'Transfer Request Missing Actual Read Notification']

(2) If a requested transfer for a basic metered delivery point which is not a move in is pending and AEMO does not receive notification of an actual value for the delivery point within the allowable period, then within 24 hours of the lapse of the allowable period AEMO must:

- a) cancel the requested transfer; and
- b) notify, by means of AseXML, the incoming user, current user and the network operator that the requested transfer is cancelled.

Notification format defined in [ICD: TFR-CAN-NOTF 'Transfer Cancellation Notification']

102 Requirements for a transfer confirmation

A *transfer confirmation*, issued under this clause, must specify at least the following information:

- a) the MIRN; and
- b) the transfer day;
- c) in relation to the Network Operator and the Current User for that delivery point the GBO-ID of the Incoming User
- d) in relation to the Incoming User who delivered the transfer request to AEMO for that delivery point the GBO-ID of the Current User for that delivery point.

103 The transfer

(1) If:

- a) a transfer for a basic metered delivery point is pending; and
- b) on gas day D AEMO receives metering data under clause 158 that contains an actual value for the delivery point:
 - (i) within *the allowable period*; and

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- (ii) which would result in the *transfer day* being on or after the *earliest transfer day* and on or before the end of the *allowable period*,

then:

- c) the transfer takes effect as from the transfer time; and

{Note: The *transfer day* is the *gas day* upon which the *meter reading* that generated the *actual value* is obtained. The *incoming user* is responsible for all transportation and haulage charges to and all *gas* withdrawals from the *delivery point* from the beginning of the *transfer day*.}

{Note: Upon accepting a *meter reading* under clause 103(1)(b), AEMO must update the *AEMO registry* under clause 52(a).}

- d) AEMO must:

- (i) update *the AEMO standing data* under clause 5252(a) and
- (ii) notify the *incoming user*, the *network operator* and the *current user* by means of *AseXML*, that the *transfer* is confirmed, which notice shall be referred to as a *transfer confirmation*, within the following time:
- (iii) if the metering data received under clause 103(1)(b) is received before close of business of a gas day — by the end the gas day; and
- (iv) otherwise — by the end of the following gas day.

Notification format defined in [ICD: TFR-CONF-NOTF ‘Transfer Confirmation’]

- (v) notify, within 24 hours, by means of *AseXML*, the *network operator* and the *current user* of the *AEMO standing data* for the *delivery point*; and

Notification format defined in [ICD: DSD ‘Deliver standing data’]

{Note: In parallel to the transfer process under these Procedures, the incoming user needs to negotiate with the network operator either to agree suitable amendments to its haulage contract to reflect the addition of a delivery point, or to agree a haulage contract. These matters are dealt with under the Access Arrangement. The incoming user may need to deal with other matters as well, such as licensing.}

- (2) If

- a) a transfer is pending for an interval metered delivery point; and
- b) the earliest transfer day equals today’s date

then:

the *transfer* takes effect as from the *transfer time*; and AEMO must forthwith notify the *incoming user*, the *network operator* and the *current user* by means of *AseXML*, that the *transfer* is confirmed, which notice shall be referred to as a *transfer confirmation*, by the commencement of the gas day:

Notification format defined in [ICD: TFR-CONF-NOTF ‘Transfer Confirmation’]

(3) Upon receipt of the transfer confirmation under clause 103(1)(d)(i), the network operator must:

- a) with effect from the transfer time, record the incoming user in the network information system as the entity which is withdrawing gas at the delivery point; and
- b) within 24 hours provide to the incoming user:
 - (i) subject to clause 103(4) the *MIRN standing data*, and the *meter standing data*; and
 - (ii) for a *basic-metered delivery point* only, the *index reading* from the *metering data AEMO* received for the *delivery point* under clause 158 as referred to in clause 103(1)(b).

(4) Until such time as the network operator gives notice to AEMO under this clause 103(4) (which notice AEMO must forward to all users), the network operator is not required to provide the MIRN standing data under clause 103(3)(b)(i) until requested by the incoming user.

Part 3.4 There is no Part 3.4

104 There is no clause 104

Part 3.5 Disconnection and reconnection of delivery points

105 Disconnecting delivery points

No [BS] requirement. Refer to [RMP] for context only.

106 If disconnection notice is not valid

No [BS] requirement. Refer to [RMP] for context only.

107 If disconnection notice is valid

(1) Upon receipt of a valid disconnection notice, subject to clause 105(5), a network operator must:

- a) accept the disconnection notice; and
- b) immediately notify the user that the disconnection notice has been accepted.

(2) Subject to clause 108(3), a network operator must (subject to law) at the same time, within 2 business days after receiving a valid disconnection notice, disconnect and undertake a meter reading of, and obtain the meter reading data for, the delivery point.

(3) Within 2 business days of disconnecting a delivery point under clause 105(1) or 107(2), the network operator must:

- a) calculate the *actual value* for the *delivery point* using the information obtained under clause 107(2); and

- b) change the MIRN status in its MIRN database to decommissioned; and
- c) notify the user that the MIRN is decommissioned and provide the user with the metering data in accordance with clause 158, for the meter reading undertaken in accordance with clause 107(2); and
- d) lodge a disconnection confirmation notice, by means of AseXML, with AEMO; and

Notification format defined in [ICD: DIS-CON 'Disconnection confirmation notice']

- e) provide AEMO with the metering data in accordance with clause 158, by means of AseXML, for the meter reading undertaken in accordance with clause 107(2).

Notification format defined in [ICD: BSCMR 'Basic Meter Read Data' or ICD: INTMR 'Interval Meter Read Data']

108 Disconnection withdrawal notice

No [BS] requirement. Refer to [RMP] for context only.

109 If disconnection withdrawal notice is not valid

No [BS] requirement. Refer to [RMP] for context only.

110 If disconnection withdrawal notice is valid

No [BS] requirement. Refer to [RMP] for context only.

111 Disconnection by user (basic meter only)

(1) There is no clause 111(1)

(2) This clause 111 applies only:

- a) to the extent that a user is permitted by law or a contract other than the [RMP] to do something described in this clause 111; and
- b) with respect to basic-metered delivery points.

(3) If the user undertakes a disconnection at the delivery point, it must at the same time undertake a meter reading of, and obtain the meter reading data for, the delivery point.

(4) Within 1 business day after disconnecting a delivery point under clause 111(3), the user must notify the network operator that the delivery point is disconnected, which notice must specify at least the following information:

- a) the MIRN; and
- b) the date of current meter read; and

- c) the current index reading;

(5) By providing a notice to a network operator under clause 111(4), the person providing the notice represents and warrants to the network operator and all other participants that:

- a) the person is the current user; and
- b) the disconnection occurred; and
- c) the notice is provided within the time limit specified in clause 111(4); and
- d) the person was authorised by law or a contract other than the Retail Market Procedures to undertake the disconnection; and
- e) the data provided under clause 111(4) is accurate.

(6) After receiving a notice under clause 111(4) the network operator must within 1 business day:

- a) calculate the actual value for the delivery point using the information obtained under clause 111(4); and
- b) change the MIRN status to decommissioned; and
- c) notify the user that the MIRN is decommissioned, and provide the user with the metering data in accordance with clause 158 for the meter reading undertaken in accordance with clause 111(3) and
- d) lodge a disconnection confirmation notice, by means of AseXML, with AEMO; and

Notification format defined in [ICD: DIS-CON 'Disconnection confirmation notice']

- e) provide the data estimation entity with the metering data, by means of AseXML, in accordance with clause 158 for the meter reading undertaken in accordance with clause 111(3).

Notification format defined in [ICD: BSCMR 'Basic Meter Read Data' or ICD: INTMR 'Interval Meter Read Data']

(7) If a user other than the current user undertakes a disconnection at a delivery point, as soon as the network operator becomes aware of this fact, it must as soon as practicable (and at the user's expense) reconnect the delivery point or procure its reconnection.

112 Disconnection confirmation notice

A *disconnection confirmation notice* must specify at least the following information:

- a) the MIRN; and
- b) the GBO identification of the network operator lodging the disconnection confirmation notice; and
- c) the date on which the MIRN became disconnected.

113 Requirements for valid disconnection confirmation notice

Upon receipt of a *disconnection confirmation notice*, AEMO must validate that:

- a) the delivery point exists within AEMO; and
- b) the disconnection confirmation notice is lodged by the network operator, who has an active GBO identification; and
- c) the MIRN status is not deregistered; and
- d) the date on which the disconnection confirmation notice is received is on or after the date on which the MIRN became disconnected; and
- e) there is no open disconnection transaction or open permanent removal transaction for the delivery point; and
- f) the date on which the delivery point was disconnected did not occur more than 425 days before the date on which the disconnection confirmation notice is processed by AEMO.

114 If disconnection confirmation notice is not valid

Upon receipt of a *disconnection confirmation notice* which is not valid, AEMO must *immediately*:

- a) reject the disconnection confirmation notice; and
- b) acknowledge the network operator that lodged the disconnection confirmation notice that the disconnection confirmation notice has been rejected and provide the rejection reason.

115 If AEMO does not receive valid metering data

(1) If AEMO does not receive valid metering data in accordance with clause 107(3)(e) or 111(6)(e) (as applicable) within 2 business days of receiving a valid disconnection confirmation notice lodged under either clause 107(3)(d) or 111(6)(d) in respect of the same delivery point, AEMO must notify the network operator of this fact :

(2) If AEMO does not receive valid metering data referred to in clause 115(1) within 7 business days of the date the valid disconnection confirmation notice is received by AEMO, then AEMO must:

- a) promptly notify, by means of a notice, the network operator that lodged the disconnection confirmation notice that the disconnection confirmation notice has been cancelled and the reason for the cancellation;
- b) Notification format defined in [ICD: DIS-CAN-NOTF ‘Disconnection Cancelled Notification’]
- c) promptly notify, by means of a notice, the network operator that lodged the reconnection confirmation notice that the reconnection confirmation notice has been cancelled and the reason for the cancellation; and

*Notification format defined in [ICD: REC-CAN-NOTF
'Reconnection Cancelled Notification']*

116 If disconnection confirmation notice is valid and valid metering data is received

(3) Subject to clause 116(2), upon receipt of both a valid disconnection confirmation notice lodged under clause 107(3)(d) or 111(6)(d) and valid metering data in accordance with clause 107(3)(e) or 111(6)(e) (as applicable), AEMO must:

- a) forthwith accept the disconnection confirmation notice; and
- b) promptly notify the network operator that the disconnection confirmation notice has been accepted.

{Note: Upon accepting a valid *disconnection confirmation notice* under clause 116(1) and receiving valid *metering data* in accordance with clause 107(3)(e) or 111(6)(e) (as applicable), AEMO must update the *AEMO registry* under clause 51(b) by changing the *MIRN status* to *decommissioned* and provide the *user* and *network operator* with the *AEMO standing data* for the *delivery point* under clause 53.}

(4) Before accepting a valid disconnection confirmation notice under clause 116(1), if:

- a) in respect of the same delivery point there is an open reconnection confirmation notice when AEMO receives a valid disconnection confirmation notice and valid metering data as referred to under clause 116(1); and
- b) the date of reconnection in the reconnection confirmation notice is the same date as the date of disconnection in the disconnection confirmation notice,

then, upon receiving valid *metering data* in accordance with clause 107(3)(e) or 111(6)(e) (as applicable), AEMO must:

- c) cancel both the open reconnection confirmation notice and the disconnection confirmation notice; and
- d) notify the network operator that the reconnection confirmation notice and the disconnection confirmation notice have been cancelled.

Notification format defined in [ICD: DIS-CAN-NOTF 'Disconnection Cancelled Notification']

{Note: Due to AEMO cancelling both the open reconnection confirmation notice and the disconnection confirmation notice, AEMO is not required to update the AEMO registry under clause 51(b) because AEMO has not accepted the disconnection confirmation notice. Therefore no change will be made in the AEMO registry to the MIRN status of the delivery point. Refer also to corresponding clause 124(2).}

117 Reconnecting delivery points

No [BS] requirement. Refer to [RMP] for context only.

118 If reconnection notice is not valid

No [BS] requirement. Refer to [RMP] for context only.

119 If reconnection notice is valid

(1) Upon receipt of a valid reconnection notice, subject to clause 117(5), a network operator must:

- a) forthwith accept the reconnection notice; and
- b) immediately notify the user that the reconnection notice has been accepted.

(2) A network operator must (subject to law) at the same time, within 2 business days after receiving a valid reconnection notice, reconnect the delivery point and undertake a meter reading of, and obtain the meter reading data for, the delivery point.

{Note: A network operator's obligation to reconnect a delivery point after receiving a valid request from a user to do so, is also set out in section 3.1 of the Distribution Code as issued by ESCOSA.

(3) Within 2 business days of reconnecting a delivery point under clause 117(1) or 119(2), the network operator must:

- a) calculate the actual value for the delivery point using the information obtained under clause 119(2); and
- b) change the MIRN status in its MIRN database to commissioned; and
- c) notify the user that the MIRN is commissioned and provide the user with the metering data under clause 158 for the meter reading undertaken in accordance with clause 119(2).
- d) lodge a reconnection confirmation notice with AEMO; and

Notification format defined in [ICD: REC-CON 'Reconnection confirmation notice']

- e) provide AEMO with the metering data under clause 158 for the meter reading undertaken in accordance with clause 119(2).

Notification format defined in [ICD: BSCMR 'Basic Meter Read Data' or ICD: INTMR 'Interval Meter Read Data']

120 Reconnection confirmation notice

A *reconnection confirmation notice* must specify at least the following information:

- a) the MIRN; and
- b) the GBO identification of the network operator lodging the reconnection confirmation notice; and
- c) the date on which the delivery point was reconnected.

121 Requirements for valid reconnection confirmation notice

Upon receipt of a *reconnection confirmation notice* under clause 120, *AEMO* must validate that:

- a) the delivery point exists within the AEMO Registry; and
- b) the reconnection confirmation notice is lodged by the network operator, who has an active GBO identification; and
- c) the MIRN status is not deregistered; and
- d) the date on which the *reconnection confirmation notice* is received is on or after the date on which the delivery point was reconnected ; and
- e) there is no open reconnection transaction or permanent removal transaction for the delivery point; and
- f) the date on which the delivery point was reconnected did not occur more than 425 days before the date on which the reconnection confirmation notice is processed by AEMO.

122 If reconnection confirmation notice is not valid

Upon receipt of a *reconnection confirmation notice* which is not valid, *AEMO* must *immediately*:

- (1) reject the reconnection confirmation notice; and
- (2) acknowledge the network operator to indicate that the reconnection confirmation notice has been rejected and provide the rejection reason

123 If reconnection confirmation notice is valid and AEMO does not receive valid metering data

(1) If AEMO does not receive valid metering data in accordance with clause 119(3)(e) within 2 business days of receiving a valid reconnection confirmation notice lodged under clause 119(3)(d) in respect of the same delivery point, AEMO must notify the network operator of this fact.

Notification format defined in [ICD: REC-MR-ALT 'Missing Data Notification']

(2) If AEMO does not receive valid metering data referred to in clause 123(1) within 7 business days of the date the valid reconnection confirmation notice is received by AEMO, then AEMO must:

- a) as soon as practicable cancel the reconnection confirmation notice; and
- b) promptly notify the network operator that lodged the reconnection confirmation notice that the reconnection confirmation notice has been cancelled and the reason for the cancellation.

Notification format defined in [ICD: REC-CAN-NOTF 'Reconnection Cancelled Notification']

124 If reconnection confirmation notice is valid and valid metering data is received

(1) Subject to clause 124(2), upon receipt of both a valid reconnection confirmation notice lodged under clause 119(3)(d) and valid metering data in accordance with clause 119(3)(e), AEMO must:

- a) forthwith accept the reconnection confirmation notice; and
- b) promptly notify the network operator that the reconnection confirmation notice has been accepted.

{Note: Upon accepting a valid *reconnection confirmation notice* under clause 124 and receiving valid *metering data* in accordance with clause 119(3)(e), AEMO must update the *AEMO registry* under clause 51(c) by changing the *MIRN status* to *commissioned* and provide the *user* and *network operator* with the *AEMO standing data* for the *delivery point* under clause 53.}

(2) Before accepting a valid reconnection confirmation notice under clause 124(1), if:

- a) in respect of the same delivery point there is an open disconnection confirmation notice when AEMO receives a valid reconnection confirmation notice and valid metering data as referred to under clause 124(1); and
- b) the date of disconnection in the disconnection confirmation notice is the same date as the date of reconnection in the reconnection confirmation notice,

then, upon receiving valid metering data in accordance with clause 119(3)(e), AEMO must:

- c) cancel both the open disconnection confirmation notice and the reconnection confirmation notice; and
- d) notify the network operator that the disconnection confirmation notice and the reconnection confirmation notice have been cancelled.

Notification format defined in [ICD: DIS-CAN-NOTF 'Disconnection Cancelled Notification']

{Note: Due to AEMO cancelling both the open disconnection confirmation notice and the reconnection confirmation notice, AEMO is not required to update the AEMO registry under clause 51(c) because AEMO has not accepted the reconnection confirmation notice. Therefore no change will be made in the AEMO registry to the MIRN status of the delivery point. Refer also to corresponding clause 116(2).}

Part 3.6 Permanently removing delivery points and deregistering MIRNs

125 Permanently removing delivery points

No [BS] requirement. Refer to [RMP] for context only.

126 If permanent removal request is not valid

No [BS] requirement. Refer to [RMP] for context only.

127 If permanent removal request is valid

(1) Upon receipt of a valid permanent removal request, subject to clause 125(6), a network operator must (subject to law):

- a) forthwith accept the permanent removal request; and
- b) immediately notify the user that the permanent removal request has been accepted; and
- c) permanently remove the delivery point and, if there is a meter installed at the delivery point, undertake a meter reading of, and obtain the meter reading data for, the delivery point on the later of:
 - (i) the date requested by the *user* under clause 125(4)(a)(iii); or
 - (ii) 5 *business days* after receiving the *permanent removal request*.

(2) As soon as practicable after a delivery point has been permanently removed under clause 125(1) or clause 127(1)(c), and in any event within 5 business days, the network operator must:

- a) calculate the actual value for the delivery point using the information obtained under clause 127(1)(c); and
- b) change the MIRN status to deregistered; and
- c) notify the user that the delivery point has been permanently removed; and
- d) lodge a permanent removal confirmation notice, by means of AseXML, with AEMO; and

Notification format defined in [ICD: PR-CON 'Permanent removal confirmation notice']

- e) provide AEMO and the user with the metering data, by means of AseXML, from as applicable:
 - (i) the *meter reading* undertaken in accordance with clause 158; or
 - (ii) if there was no meter installed at the *delivery point*, the *meter reading* which was undertaken under clause 107(2) when the meter was removed.

Notification format defined in [ICD: BSCMR 'Basic Meter Read Data' or ICD: INTMR 'Interval Meter Read Data']

128 Permanent removal confirmation notice

A *permanent removal confirmation notice* must specify at least the following information:

- a) the MIRN; and
- b) the GBO identification of the network operator lodging the permanent removal confirmation notice; and

- c) the date on which the delivery point was permanently removed.

129 Requirements for valid permanent removal confirmation notice

Upon receipt of the *permanent removal confirmation notice* AEMO must validate:

- a) the delivery point exists within the AEMO Registry; and
- b) the permanent removal confirmation notice is lodged by the network operator, who has an active GBO identification; and
- c) the MIRN status is commissioned or decommissioned; and
- d) the date on which the permanent removal confirmation notice is received is on or after the date on which the delivery point was permanently removed; and
- e) the date on which the delivery point was permanently removed did not occur more than 425 days before the date on which the permanent removal confirmation notice is processed by AEMO.

130 If permanent removal confirmation notice is not valid

Upon receipt of a *permanent removal confirmation notice* which is not valid, AEMO must *immediately*:

- a) reject the permanent removal confirmation notice; and
- b) acknowledge the network operator that the permanent removal confirmation notice has been rejected and provide the rejection reason.

131 If AEMO does not receive valid metering data

(3) If AEMO does not receive valid metering data in accordance with clause 127(2)(e) within 5 business days of receiving a valid permanent removal confirmation notice lodged under clause 127(2)(d) in respect of the same delivery point, AEMO must notify the network operator of this fact.

(4) If AEMO does not receive valid metering data referred to in clause 127(2)(e) within 10 business days of the date the valid permanent removal confirmation notice is received by AEMO, then AEMO must:

- a) as soon as practicable cancel the permanent removal confirmation notice; and
- b) promptly notify the network operator that lodged the permanent removal confirmation notice that the permanent removal confirmation notice has been cancelled and the reason for the cancellation.

{Note: A network operator wishing to reinitiate a permanent removal confirmation notice that has been cancelled must lodge a new permanent removal confirmation notice.}

Notification format defined in [ICD: PR-MR-ALT 'No permanent removal meter reading alert']

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Notification format defined in [ICD: PR-CAN-NOTF 'Permanent Removal Cancelled Notification']

132 If permanent removal confirmation notice is valid and valid metering data is received

Upon receipt of a valid permanent removal confirmation notice, AEMO must:

- a) forthwith accept the permanent removal confirmation notice; and
- a) promptly acknowledge the network operator to indicate that the permanent removal confirmation notice has been accepted.

{Note: Upon accepting a valid *permanent removal confirmation notice* under clause 132 and receiving valid *metering data* in accordance with clause 127(2)(e), AEMO must update the *AEMO registry* under clause 51(d) by changing the *MIRN status* to *deregistered* and provide the *user* and *network operator* with the *AEMO standing data* for the *delivery point* under clause 53.}

133 Effect of permanent removal

(1) Upon accepting a valid *permanent removal confirmation notice* under clause 132, AEMO must:

- a) cancel all open transactions in respect of the MIRN and
- a) advise all affected parties of the cancellation by means of AseXML;

Notification format defined in [ICD: ECNET-CAN-NOTF 'Error Correction Cancellation Notification']

Notification format defined in [ICD: DIS-CAN-NOTF 'Disconnection Cancelled Notification']

Notification format defined in [ICD: REC-CAN-NOTF 'Reconnection Cancelled Notification']

Notification format defined in [ICD: TFR-CAN-NOTF 'Transfer Cancellation Notification']

Notification format defined in [ICD: DCN-CAN-NOTF 'Data Change Notice Cancelled Notification']

Notification format defined in [ICD: PR-CAN-NOTF 'Data Change Notice Cancelled Notification']

(2) A MIRN with a MIRN status of deregistered must never be given another MIRN status.

{Note: Clause 133(2) renders irreversible the process of removing a *delivery point* and *deregistering* a *MIRN*, except if a valid *error correction notice* has been accepted by AEMO under clause 35(a) in respect of an incorrect *permanent removal confirmation notice*. If no valid *error correction notice* has been accepted by AEMO, then if *gas* supply is to be recommenced at the *delivery address*, a new *MIRN* must be assigned.}.

4. Metering

Part 4.1 Metering Equipment

134 Network operator must provide meters

No [BS] requirement. Refer to [RMP] for context only.

135 Basic meters

No [BS] requirement. Refer to [RMP] for context only.

136 Units for basic meters

No [BS] requirement. Refer to [RMP] for context only.

137 Interval meters

No [BS] requirement. Refer to [RMP] for context only.

138 There is no clause 138

139 There is no clause 139

140 There is no clause 140

141 Metering upgrades

No [BS] requirement. Refer to [RMP] for context only.

Part 4.2 Meter reading requirements

142 Interval meters to be read daily

No [BS] requirement. Refer to [RMP] for context only.

143 Basic meters to be read in accordance with meter reading schedule

No [BS] requirement. Refer to [RMP] for context only.

144 Network operator to establish meter reading schedules

No [BS] requirement. Refer to [RMP] for context only.

145 Amendments to meter reading schedule

No [BS] requirement. Refer to [RMP] for context only.

146 There is no clause 146

147 Special meter readings (basic meters only)

No [BS] requirement. Refer to [RMP] for context only.

148 Deemed meter reading

No [BS] requirement. Refer to [RMP] for context only.

149 Basic meters to have at least one meter reading that generates an actual per year

No [BS] requirement. Refer to [RMP] for context only.

150 Meter reading activities by another entity

No [BS] requirement. Refer to [RMP] for context only.

Part 4.3 Gate point metering data

151 Pipeline operators to provide physical gate point metering data

No [BS] requirement. Refer to [RMP] for context only.

152 Network operator to provide gate point metering data to the data estimation entity

(1) Subject to clause 152(5) the network operator must:

- a) aggregate the physical gate point metering data provided under clause 152(4), for the gas day and for each hour in the gas day, in each case across all physical gate points associated with the sub-network (the aggregated hourly and daily data being the “gate point metering data”); and
- b) provide to the data estimation entity as soon as reasonably practicable after receiving the physical gate point metering data from the pipeline operator under clause 151(1), but in any event, no later than 3.5 hours after the end of the gas day:
 - (i) the gate point metering data; or
 - (ii) an estimate under clause 151(3) of the gate point metering data.

GPMD: Gate Point Metering Data

Gate Point Identifier

Gas day

Hourly Energy

Total Daily Energy

Read Type Flag

Notification format defined in [ICD][GPMD – Gate Point Metering Data].

(2) If the network operator receives amended physical gate point metering data under clause 151(3) at any time (including if the data is refined or verified), the network operator must as soon as reasonably practicable:

- a) aggregate the amended physical gate point metering data under clause 151(1)(a); and
- b) provide to the data estimation entity the amended gate point metering data determined under clause 152(2)(a)

(3) If for any reason (including the operation of clause 151(4) the network operator does not receive the physical gate point metering data within the time specified in clause 151(1), then the network operator must:

- a) as a reasonable and prudent person estimate the gate point metering data, for the gas day and each hour in the gas day, for each gate point; and
- b) provide the estimate to the data estimation entity within 3.5 hours of the end of the gas day.
- c) mark the estimated gatepoint metering data as an estimate

{Note: If after complying with its obligation under clause 152(1) or clause 152(2) the *network operator* becomes aware of a manifest error in the data it has provided then the *network operator* may notify AEMO under clause 301A(1).}

(4) If the network operator receives physical gate point metering data aggregated across a period of more than one gas day, then the network operator must as a reasonable and prudent person apportion the physical gate point metering data across each gas day in the period for which the physical gate point metering data was provided; and

(5) Clause 152(1) does not apply in respect of the gate point metering data for:

- a) a farm tap sub-network; or
- b) an uncovered sub-network.

Part 4.4 Metering Data

153 Verification of meter reading data

A network operator must verify the *meter reading data* obtained from the *meter* or *meters* at a *delivery point* in accordance with the applicable *verification* guidelines set out in Appendix 2 , before providing *metering data* under this Part 4.4 section.

154 Energy Value

A network operator must calculate the *energy value* in accordance with clauses 155 to 157, before providing *metering data* under this section Part 4.4.

155 Actual values

No [BS] requirement. Refer to [RMP] for context only.

156 Estimated values

No [BS] requirement. Refer to [RMP] for context only.

157 Substituted values

No [BS] requirement. Refer to [RMP] for context only.

158 Time for provision of metering data to current users and AEMO – basic & interval meters

No [BS] requirement. Refer to [RMP] for context only.

159 Changes to MIRN standing data and meter standing data relevant to calculations

If, in relation to a *delivery point*, any of the following information changes:

- a) the MIRN status; and
- b) the meter number; and
- c) the meter type; and
- d) the index type; and
- e) the gas zone code; and
- f) the pressure correction factor; and
- g) for a basic meter — the number of dials,

then, the *network operator* must provide at least the updated item of *MIRN standing data* or *meter standing data* (as applicable) to the *user*, before providing the *metering data* under clause 158.

160 Metering data for current users – basic and interval meters

No [BS] requirement. Refer to [RMP] for context only.

161 Metering data for new connections – basic meters

No [BS] requirement. Refer to [RMP] for context only.

162 Metering data for AEMO – basic and interval meters

For each occasion on which these *Procedures* require a *network operator* to provide AEMO with *metering data*, it must provide at least the following (as applicable):

- a) the MIRN; and
- b) date of the previous meter reading; and

{Note: For an *interval meter*, the date of the previous *meter reading* will be the previous *gas day*.}

- c) date of current meter reading; and
- d) energy value type; and
- e) for a basic-metered delivery point the energy value; and
- f) for an interval-metered delivery point:
 - (i) for each hour in the gas day, the energy value; and
 - (ii) the energy value.

Notification format defined in [ICD][BSCMR – Basic Meter Reading Data].

163 Requirement for valid provision of metering data to the data estimation entity

The data estimation entity will validate meter reading data provided to it under clause 158 as defined below:

- a) If the delivery point does not exist within the data estimation entity then the reading will be rejected.
- b) If the network operator does not have an active GBO identification, then the reading will be rejected
- c) If the energy value of the meter reading is not a positive number the meter reading will be rejected
- d) If the start date and end date of the meter reading are not valid dates then the meter reading will be rejected.
- e) If the start date is later than the end date then the meter reading will be rejected.
- f) The start date of the metering period must be the same as end date of an existing metering period – such that there is no gap between the end date of one reading and the start date of the next. In the case that the read is either the first read for a delivery point - or is a replacement for the first read, then the consumption start date must be the same as the effective start date of the delivery point.
 - (i) If a read is received that has the same start and end date as an existing read, then the new read will replace the existing read – leaving all other reads untouched subject to the energy value type precedence.
 - (ii) If a read is received that has the same start date but a different end date as an existing read, then the new read will replace the existing read, all the existing reads that fell

chronologically after the new read will be discarded, and the new read will become the latest read.

{Note: For the purposes of clause 163 the start and end dates of a metering period are the dates upon which a meter reading is taken (bearing in mind that the meter reading is deemed by clause 5 to have occurred at the start of the gas day). For example, if a meter reading is taken at 1100 hours on 5 February and then another meter reading is taken at 1600 hours on 8 March and another at 0900 hours on 12 April, then:

(a) the start date of the first metering period is 5 February and the end date is 8 March (and the metering data for this metering period includes gas consumed on the 7 March gas day but not gas consumed on the 8 March gas day); and

(b) the start date of the second metering period is 8 March and the end date is 12 April (and the metering data includes gas consumed on the 11 April gas day but not gas consumed on the 12 April gas day).}

If the provider of the meter reading data is not the current network operator of the sub-network the delivery point is registered in the data estimation entity then the reading will be rejected.

- g) If the start date of the meter reading is greater than 425 days old, then the reading will be rejected.
- h) The metering period does not cover any period during which the MIRN was deregistered.

For each occasion on which metering data for basic-metered delivery points is to be provided to the data estimation entity, the metering data must be provided, by means of AseXML, and include at least the following:

BSCMR: Basic Meter Reading Data

Delivery Point Identifier

Date of the previous meter reading

Date of the current meter reading

Energy value

Meter reading type

Notification format defined in [ICD][BSCMR – Basic Meter Reading Data].

Notification format defined in [ICD][BSCMR-RESP: Basic Meter Reading Data Response].

For each occasion on which metering data for interval-metered delivery points is to be provided, by means of an automated electronic file, to the data estimation entity, the at least the following information must be included:

INTMR: Interval Meter Reading Data

Delivery Point Identifier

Date of the meter read

Hourly energy values

Total daily energy value

Meter reading type

Notification format defined in [ICD][INTMR – Interval Meter Reading Data].

164 Replacement of energy value types in the Data Estimation Entity

If the *data estimation entity* receives *metering data* under clause 162 for a *delivery point* more than once for the same *metering period*, the *data estimation entity* must replace the *metering data* if it receives *metering data* for a previous *metering period* that contains a better quality *energy value* as determined in accordance with the following:

- a) An estimated value may be replaced by any other energy value; and
- b) An actual value may be replaced by another actual value or a substituted value; and
- c) A substituted value may be replaced by another substituted value.

165 If metering data is not valid

Upon receipt of *metering data* under clause 158 which is not valid, AEMO must *immediately*:

- a) reject the metering data; and
- b) notify the network operator that lodged the metering data that it has been rejected and provide the reason why the metering data is not valid.

Notification format defined in [ICD][INTMR – Interval Meter Reading Data].

{Note: A *network operator* must re-send the *metering data* to AEMO to comply with its obligations under clause 158.}

166 If metering data is valid

Upon receipt of metering data under clause 158 that is valid, AEMO must:

- a) forthwith accept the metering data; and
- b) promptly notify the network operator that the metering data has been accepted.

Notification format defined in [ICD][INTMR – Interval Meter Reading Data].

166A. Explicit informed consent required

(1) Before lodging a request with a network operator for historical metering data or historical meter reading data for a delivery point that relates to a period for which the user was not the current user, a user must obtain the customer's explicit informed consent to the receipt by the user of the requested data.

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{Note: The *user* should ensure that the *customer's* consent extends to all actions the *user* may need to undertake to complete the request for the *historical metering data or historical meter reading data.*}

(2) If at any time before the network operator has provided information to a user under clause 167(4), a customer's explicit informed consent under clause 166A(1) ceases to apply (for example because it is withdrawn), then the user must withdraw the request to the extent that the request relied upon the customer's explicit informed consent.

(3) If at any time after the network operator has provided information to a user under clause 167(4), a customer's explicit informed consent under clause 166A(1) ceases to apply (for example because it is withdrawn), then the user must not use the information for any purpose and must to the extent reasonably practicable delete all copies of the information.

167 Provision of Historical metering data to User on request

No [BS] requirement. Refer to [RMP] for context only.

168 Archived historical metering data and historical meter reading data

No [BS] requirement. Refer to [RMP] for context only.

169 Heating value data calculations

No [BS] requirement. Refer to [RMP] for context only.

170 Heating value data to be retained

No [BS] requirement. Refer to [RMP] for context only.

171 Publication of heating value data

No [BS] requirement. Refer to [RMP] for context only.

5. Balancing, Allocation and Reconciliation

{Note: This Chapter 5 assumes that the allocation and reporting arrangements for each part the *GDS* will continue for each *sub-network* supplied by a single pipeline. However, for the allocation, reconciliation and reporting arrangements, these Procedures are to distinguish between allocations for the Adelaide Metro *sub-network* operating under the STTM Procedures (i.e. gas zone codes 21011 and 21012) and the separate allocations for each remaining *sub-network* which will continue to operate under these Procedures.}

Part 5.1 Introduction

171A Exemption for farm tap sub-networks and single pipeline sub-networks

No [BS] requirement. Refer to [RMP] for context only.

172 There is no clause 172

No [BS] requirement. Refer to [RMP] for context only.

173 The Shipper Register

(1) AEMO must establish a shipper register for the purposes of this Chapter 5

a) which sets out for each user for each sub-network:

(i) a list of the *shippers* that have provided a valid *listing request* to AEMO; and

b) subject to this CHAPTER 5, the contents of which AEMO must keep confidential.

(2) A shipper may at any time directly or through an agent provide:

a) a request (“listing request”) to AEMO to list it in the shipper register in respect of a user and a sub-network from a specified “effective date”; or

Notification format defined in [ICD][SHPREGLST: Shipper Listing Request].

b) a request (“delisting request”) to AEMO to remove its listing from the shipper register in respect of a user and a sub-network from a specified “effective date”.

Notification format defined in [ICD][SHPREGLST: Shipper Listing Request].

(3) A listing request by a shipper under clause 173(2) is a statement by the shipper that the shipper agrees to be listed from time to time in the user’s allocation instruction in respect of the user’s gas injections into the sub-network, and is valid if:

a) it includes the shipper’s GBO identification and the shipper has an active GBO identification; and

b) it includes a written confirmation from the pipeline operator that the shipper has a gas transmission contract in the pipeline; and

c) there is no clause 173(3)(c).

(4) There is no clause 173(4).

(5) Upon receipt of a valid listing request or a delisting request, AEMO must update the shipper register accordingly:

a) where the request is received from a shipper:

(i) where the effective date is within 2 business days of the date of the listing request or delisting request – as soon as practicable, and in any event before the end of the business day on which AEMO receives the listing request or delisting request, to apply at the latest in respect of the gas day starting 2 business days later; and

(ii) where the effective date is 2 business days from the date of the listing request or delisting request or later – to apply in respect of the first gas day after the effective date, and

b) there is no clause 173(5)(b).

(6) If requested by a pipeline operator, AEMO must as soon as practicable advise the pipeline operator of all shippers listed in the shipper register in respect of a gate point which interconnects the pipeline operator's pipeline and a sub-network.

Notification format defined in [ICD][SHPREGREQ: Pipeline Operator Request].

Report format defined in [ICD][SHPREGRPT: Pipeline Operator Report].

(7) If a shipper does not have a gas transmission contract in a pipeline, the pipeline operator may give a notice ("removal request") to AEMO requesting AEMO to remove the shipper from the shipper register for the pipeline.

(8) There is no clause 173(8).

(9) By providing a removal request, the pipeline operator represents and warrants to AEMO that the shipper named in the removal request does not have a gas transmission contract in the pipeline.

(10) {Note: Under clause 376A(2), a breach of this warranty will expose the pipeline operator to liability for more than just direct damage. }

(11) On receipt of a removal request, AEMO must:

a) as soon as practicable and in any event within 12 hours, advise the shipper and each user in respect of which the shipper is listed in the shipper register that, on the pipeline operator's request, the shipper will be removed from the shipper register in respect of the gate point which interconnects the pipeline and the sub-network; and

b) remove the shipper from the shipper register in respect of the gate point which interconnects the pipeline and the sub-network as soon as practicable and in any event before the end of the business day on which AEMO

receives the notification from the pipeline operator, to apply at the latest in respect of the gas day starting 2 business days later.

(12) A pipeline operator that provides a removal request to AEMO is liable to AEMO for, and must indemnify AEMO against, any loss or damage caused by or arising directly or indirectly out of or in connection with the removal request, including:

- a) the removal request not being validly given;
- b) AEMO acting in reliance on the pipeline operator's representation and warranty under clause 173(9);
- c) AEMO acting in reliance on the removal request; or
- d) AEMO removing a shipper from the shipper register in accordance with the removal request, including;
- e) any liability of AEMO to any other person, or any claim, demand, action or proceeding brought against AEMO, and any costs or expenses, including legal costs (on a full indemnity basis), in connection with the claim, demand, action or proceeding; and
- f) any consequential loss or damage however caused, including any:
 - (i) loss of (or loss of anticipated) use, production, revenue, income, profits, business and savings; or
 - (ii) loss or damage due to business interruption

whether or not the consequential loss or damage was foreseeable.

174 Only one notional gate point per pipeline for each sub-network

(1) If there is more than one physical interconnection between a given *sub-network* and a *pipeline*, then for the purposes of this section 5, the several physical points of interconnection are treated as being aggregated into a single (notional) *gate point* between the *pipeline* and the *sub-network*.

(2) If there is only one physical interconnection between a given *sub-network* and a *pipeline*, then for the purposes of this 5, that physical point of interconnection is treated as the *gate point*.

175 Gate Point Control Systems

No [BS] requirement. Refer to [RMP] for context only.

176 There is no clause 176

177 Calculation of Heating Degree Day

(1) In performing the calculations under this clause 177 AEMO must use the values set out in Appendix 11 for the following coefficients:

- a) C1;
- b) C2;
- c) C3;
- d) C4;
- e) C5;
- f) C6;
- g) C7;
- h) C8.

(2) From time to time AEMO may, and at least once per calendar year AEMO must, as a *reasonable and prudent person*, recalculate the value for each coefficient listed in this clause **Error! Reference source not found.** using linear regression of historic weather data, and as soon as practicable after the recalculation, AEMO must publish to *participants* an update to Appendix 11 specifying the recalculated values.

(3) In performing the calculations under this section **Error! Reference source not found.**, unless otherwise specified, AEMO must use the most recent available weather data prior to the time of calculation, which it must obtain from the Australian Bureau of Meteorology or another external agency, determined by AEMO as a *reasonable and prudent person* to be a suitable supplier of weather data for each of the following weather data items:

- a) the maximum air temperature for a HDD zone for a gas day, or forecast for a gas day, in degrees Celsius (“Tmax”);
- b) the minimum air temperature for a HDD zone for a gas day, or forecast for a gas day, in degrees Celsius (“Tmin”); and
- c) the hours of sun for a HDD zone for a gas day, or forecast for a gas day (“Hsun”).

(4) For each *gas day D* for each *HDD zone*, AEMO must:

- a) by 17 hours before the end of gas day D, calculate the forecast heating degree day under clause 177(5)(j) for gas day D+1;
- b) within 30 minutes before the end of the third, sixth, ninth and twelfth hours of gas day D, recalculate the forecast heating degree day under clause 177(5)(j) for gas day D; and
- c) by 4 hours after the end of gas day D, calculate the actual heating degree day for gas day D under clause 177(5)(h).

(5) In this clause 177, for each HDD zone for each gas day D:

- a) The EDD for gas day D (“E(D)”) is calculated as follows:

$$E_{(D)} = \max \left(0, 18 - \left(\frac{T_{\max(D)} + T_{\min(D)}}{2} \right) - (C_8 \times H_{\text{sun}(D)}) \right)$$

where:

$E_{(D)}$ = the EDD for the HDD zone for gas day D;

$T_{\max(D)}$ = the maximum air temperature forecast for the *HDD zone* for *gas day D* in degrees Celsius;

$T_{\min(D)}$ = the minimum air temperature forecast for the *HDD zone* for *gas day D* in degrees Celsius; and

$H_{sun(D)}$ = the hours of sun forecast for the *HDD zone* for *gas day D*,

b) The EDD for gas day D-1 (“E(D-1)”) is calculated as follows:

$$E_{(D-1)} = \max \left(0, 18 - \left(\frac{T_{\max(D-1)} + T_{\min(D-1)}}{2} \right) - (C_8 \times H_{sun(D-1)}) \right)$$

where:

$E_{(D-1)}$ = the EDD for the HDD zone for gas day D-1;

$T_{\max(D-1)}$ = the maximum air temperature forecast for the *HDD zone* for *gas day D-1* in degrees Celsius;

$T_{\min(D-1)}$ = the minimum air temperature forecast for the *HDD zone* for *gas day D-1* in degrees Celsius; and

$H_{sun(D-1)}$ = the hours of sun forecast for the *HDD zone* for *gas day D-1*,

c) The EDD for gas day D-2 (“E(D-2)”) is calculated as follows:

$$E_{(D-2)} = \max \left(0, 18 - \left(\frac{T_{\max(D-2)} + T_{\min(D-2)}}{2} \right) - (C_8 \times H_{sun(D-2)}) \right)$$

where:

$E_{(D-2)}$ = the EDD for the HDD zone for gas day D-2;

$T_{\max(D-2)}$ = the maximum air temperature forecast for the *HDD zone* for *gas day D-2* in degrees Celsius;

$T_{\min(D-2)}$ = the minimum air temperature forecast for the *HDD zone* for *gas day D-2* in degrees Celsius; and

$H_{sun(D-2)}$ = the hours of sun forecast for the *HDD zone* for *gas day D-2*,

d) The EDD for gas day D-3 (“E(D-3)”) is calculated as follows:

$$E_{(D-3)} = \max \left(0, 18 - \left(\frac{T_{\max(D-3)} + T_{\min(D-3)}}{2} \right) - (C_8 \times H_{sun(D-3)}) \right)$$

where:

$E_{(D-3)}$ = the EDD for the HDD zone for gas day D-3;

$T_{\max(D-3)}$ = the maximum air temperature forecast for the *HDD zone* for *gas day D-3* in degrees Celsius;

$T_{\min(D-3)}$ = the minimum air temperature forecast for the *HDD zone* for *gas day D-3* in degrees Celsius; and

$H_{sun(D-3)}$ = the hours of sun forecast for the *HDD zone* for *gas day D-3*,

- e) The “average temperature” for the period of 30 gas days between gas day D-30 and gas day D-1 is calculated as follows:

$$T_{30} = \frac{\sum_{i=d-1}^{d-30} (T_{\max i} + T_{\min i})}{60}$$

where:

T_{30} = the *average temperature* for the *HDD zone* for the period of 30 *gas days* between *gas day D-30* and *gas day D-1* in degrees Celsius;

$T_{\max i}$ = the maximum air temperature for the *HDD zone* in degrees Celsius for *gas day i*;

$T_{\min i}$ = the minimum air temperature for the *HDD zone* in degrees Celsius for a *gas day i*; and

i = a *gas day i* in the range of 30 *gas days* between *gas day D-30* and *gas day D-1*.

- f) The “total sun hours” for the period of 7 gas days between gas day D-7 and gas day D-1 is calculated as follows:

$$SSH_{sun7} = \frac{\sum_{i=d-1}^{d-7} H_{sun i}}{7}$$

where:

SSH_{sun7} = the *total sun hours* for the *HDD zone* for the period of 7 *gas days* between *gas day D-7* and *gas day D-1*;

$H_{sun i}$ = the hours of sun for the *HDD zone* for a *gas day*;

i = a *gas day i* in the range of 7 *gas days* between *gas day D-7* and *gas day D-1*.

- g) The “proxy ground temperature” (“T_{gnd}”) for gas day D is calculated as follows:

$$T_{gnd} = \frac{[C_4 \times \max(0, 18 - T_{30})] + [C_5 \times (18 - T_{30})]}{(C_4 + C_5)} + (C_6 \times SSH_{sun7})$$

where:

T_{gnd} = the *proxy ground temperature* for the *HDD zone* for *gas day D* in degrees Celsius;

T_{30} = the *average temperature* for the *HDD zone* for the period of 30 *gas days* between *gas day D-30* and *gas day D-1* in degrees Celsius calculated under clause 177(5)(e);

SSH_{sun7} = the *total sun hours* for the *HDD zone* for the period of 7 *gas days* between *gas day D-7* and *gas day D-1* calculated under clause 177(5)(f).

- h) The “actual heating degree day” (“HDDA”) for gas day D-1 is calculated as follows:

$$RHDD_A = (C_1 \times E_{(D-1)}) + (C_2 \times E_{(D-2)}) + (C_3 \times E_{(D-3)}) + (C_7 \times T_{gnd})$$

where:

$RHDD_A$ = the *actual heating degree day* for the *HDD zone* for *gas day D-1* provided that for each positive *HDD zone*, if that value is less than 0, HDD_A shall be treated as zero;

$E_{(D-1)}$ = the *EDD* for *gas day D-1* calculated under clause 177(5)(b); and

$E_{(D-2)}$ = the *EDD* for *gas day D-2* calculated under clause 177(5)(c); and

$E_{(D-3)}$ = the *EDD* for *gas day D-3* calculated under clause 177(5)(d); and

T_{gnd} = the *ground temperature* for the *HDD zone* for *gas day D-1* in degrees Celsius calculated under clause 177(5)(g).

- i) The “forecast EDD” for gas day D+1 is calculated as follows:

$$F_{(D+1)} = \max \left(0, 18 - \left(\frac{T_{\max(D+1)} + T_{\min(D+1)}}{2} \right) - (C_8 \times H_{sun(D+1)}) \right)$$

where:

$F_{(D+1)}$ = the *forecast EDD* for the *HDD zone* for *gas day D+1* in degrees Celsius;

$T_{\max(D+1)}$ = the *maximum air temperature forecast* for the *HDD zone* for *gas day D+1* in degrees Celsius;

$T_{\min(D+1)}$ = the *minimum air temperature forecast* for the *HDD zone* for *gas day D+1* in degrees Celsius; and

$H_{sun(D+1)}$ = the *hours of sun forecast* for the *HDD zone* for *gas day D+1* at 0900 hours CST on *gas day D*.

- j) The “forecast heating degree day” (“RHDDF”) for gas day D+1 is calculated as follows:

$$RHDD_F = (C_1 \times F_{(D+1)}) + (C_2 \times E_{(D)}) + (C_3 \times HDD_A) + (C_7 \times T_{gnd})$$

where:

$RHDD_F$ = the *forecast heating degree day* for the *HDD zone* for *gas day D+1*;

$F_{(D+1)}$ = the *forecast EDD* for the *HDD zone* for *gas day D+1* in degrees Celsius calculated under clause 177(5)(a);

$E_{(D)}$ = the EDD for *gas day D* calculated under clause 177(5)(h);

HDD_A = the *actual heating degree day* for the *HDD zone* for *gas day D-1* calculated under clause 177(5)(g);

T_{gnd} = the *ground temperature* in degrees Celsius for the *HDD zone* for *gas day D-1* calculated under clause 177(5)(g).

Part 5.2 User obligations

178 Users to procure injections which match User’s required withdrawals

No [BS] requirement. Refer to [RMP] for context only.

179 There is no clause 179

180 Procedures may require negative injection

No [BS] requirement. Refer to [RMP] for context only.

181 There is no clause 181

182 Users collectively to keep sub-network pressurised

No [BS] requirement. Refer to [RMP] for context only.

183 There is no clause 183

184 There is no clause 184

184A AEMO calculates user’s monthly interval-meter load

(1) Within 7 *gas days* after the end of each month AEMO must notify each User of its MIL for each subnetwork for the month, calculated under clause 184A(2) and AEMO must use the MILP in its calculations under clause 185 and for each gas day after the gas day on which the notice is given until AEMO notifies a new MILP for the user for the sub-network under this clause 184A.

(2) For each User for each subnetwork for each month, AEMO must calculate the *user’s “monthly interval-meter load percentage” (“MILP”)* as follows:

$$MILP = \frac{\sum UIW_{mu}}{\sum_{All\ users} UIW_m} \times 100$$

$MILP$ = the *user’s monthly interval-meter load percentage* for the *sub-network* for the month; and

UIW_{mu} = the *interval-metered withdrawals* for *user u* for *gas day m*; and

UIW_m = for a *user*, the *interval-metered withdrawals* for *gas day m*; and

m = a *gas day m* in the month.

185 User provides information to AEMO

(1) If at any time before the *gas day* or during the *gas day* a *user* becomes aware of a fact which could cause its *interval-metered withdrawals* for a *sub-network* for the *gas day* to depart by greater than “*A*”%, where “*A*” is a variable, from the *anticipated user’s interval-metered withdrawals* provided by the *user* to the AEMO for the *gas day* under clause 202(1)(b), then the *user* must notify, by means of an *automated electronic file*, AEMO of:

- a) a new anticipated user’s interval-metered withdrawals for the *gas day*

Notification format defined in [ICD][AUIW: Anticipated User’s Interval-Metered Withdrawal].

- b) a new interval-metered demand profile for the *gas day*.

Notification format defined in [ICD][IMDPROF: Interval-Meter Demand Profile].

(2) The value to be used for the variable “*A*” in this clause depends on the user’s MILP value, as calculated in clause **Error! Reference source not found.**

- a) 41% or greater, 8;
- b) in the range from 21% to 40%, 15;
- c) in the range from 11% to 20%, 20; and
- d) in the range from 0% to 10%, 30.

(3) If at any time before a *gas day* a *user* becomes aware that its related shipper’s injections into a *sub-network* is to be adjusted under the transmission contract, or that a pipeline operator does not plan to inject or repay (as applicable) gas in accordance with the shipper’s request for injections request for repayment (as applicable) under its transmission contract (for example due to a curtailment), in a manner which will cause a change to the amount of gas being injected into the *sub-network* on the *user’s* behalf, the *user* must immediately notify AEMO of the fact and the surrounding circumstances.

186 There is no clause 186

Part 5.3 Allocation Instructions for non-STTM Networks

187 User’s gas injections

In this Part 5.3, —*user’s gas injections* for a *sub-network* for a *gas day* means:

- a) There is no clause 187(a)
- b) before the end of the *gas day*, the *user’s* daily forecast calculated under clause 204(3); or

- c) after the end of the gas day, the user's estimated total withdrawals calculated under clause 208;

188 Users allocation instruction

(1) A User must give AEMO a valid allocation instruction under this Part 5.3.

- a) at least 2 business days before the gas day on which the user first withdraws gas from a sub-network; and
- b) for each gas day on which the user is likely to withdraw gas from a sub-network by 18 hours before the gas day.

(2) An allocation instruction may be expressed as a standing instruction which applies until a new valid allocation instruction is given, and may allocate the user's gas injections to shippers by:

- a) percentages;
{Example: —20% to shipper A and 80% to shipper B.}
- b) quantities, which must include an allocation of residual quantity; or
{Example: —15 TJ to shipper A, 5 TJ to shipper B and the balance to shipper All.}
- c) by a combination of the options in clauses 188(2)(a) and 188(2)(b).
{Example: —15 TJ to shipper A, and the balance 40% to shipper A and 60% to shipper B.}

(3) An allocation instruction must specify for each gas day to which it applies how the user's gas injections into the sub-network are to be allocated between the shippers injecting gas into the sub-network on the user's behalf.

UAI: User's allocation instruction

User GBO identifier

Sub-network identifier

Gas day

Shipper GBO identifier

Allocation

Notification format defined in [ICD][UAI – User's allocation instruction].

189 Revised allocation instructions

(1) A user may from time to time give AEMO a revised allocation instruction for a gas day.

(2) Subject to clause 189(3), a revised allocation instruction given under clause 189(1) may be given at any time up to 3.5 hours after the end of a gas day to which it applies.

(3) A user must not give AEMO a revised allocation instruction for a gas day after the start of the gas day:

- a) which, subject to clauses 189(4) and 189(6), purports to allocate a user's gas injections into the sub-network across pipelines in different proportions to the earlier allocation instruction in a way which for either pipeline would be expected by a reasonable and prudent person to result in more than a "A"% difference, where "A" is a variable, between the amount of gas allocated to a pipeline at the end of the gas day compared with what would have been allocated under the earlier allocation instruction; or
- b) which purports to allocate a user's gas injections into the sub-network across pipelines in a manner which would be expected by a reasonable and prudent person to result in the allocation to a pipeline of less gas at the end of the gas day than is likely to have already been injected into the sub-network by shippers on the pipeline which are injecting gas into the sub-network on the user's behalf at the likely process time of the purported revised allocation instruction by AEMO.

(4) The value to be used for the variable in clause 189(3)(a) is 10.

(5) There is no clause 189(5).

(6) A revised allocation instruction provided by a user to AEMO is not subject to the limitation in clause 189(3)(a) if the revised allocation instruction is provided by the user in extraordinary circumstances as a reasonable and prudent person in an attempt to maximise its compliance with clauses 178 and 182.

(Note: The objective of clause 189(6) is to ensure that clause 189(3)(a) does not prevent a user from taking action which is for the overall benefit of the sub-network as a whole in extraordinary circumstances. For example, a user should be able to ensure that an adequate amount of gas is supplied into a sub-network from an alternative pipeline where the capacity of its original pipeline for injecting gas into the sub-network is restricted because of sudden equipment failure or physical constraints within the sub-network.)

Notification format defined in [ICD][UAI – User's allocation instruction].

190 There is no clause 190.

191 Validity of allocation instruction

(1) Subject to this Part 5.3, a user's allocation instruction will be valid for a gas day if:

- a) the allocations in the allocation instruction are capable of being applied to allocate all the user's gas injections (whatever they are on the gas day) to a shipper; and
- b) each shipper listed in the allocation instruction is listed in the shipper register for the user for the sub-network for the gas day.

(2) AEMO must assess each allocation instruction it receives from a user, for each gas day to which the allocation instruction is stated to apply, against the criteria in clause 191(1), as soon as practicable:

- a) after it receives the allocation instruction;
- b) after the shipper register for the user for the sub-network is updated under clause 173(5), or after a shipper is removed from the shipper register in respect of a gate point for the sub-network under clause 173(10); and
- c) after it has determined the user's estimated total withdrawals for the gas day under clause 228(1).

192 If allocation instruction is invalid

(1) If AEMO determines that a user's allocation instruction is not valid, AEMO must immediately advise the user that its allocation instruction is not valid and the reason why, in order that the user can, if permitted under this Part 5.3, submit a revised allocation instruction.

(2) If a user has not provided an allocation instruction to AEMO that is valid under this Part 5.3, then AEMO must use the appropriate alternative method under this clause 192(2) for allocating the user's gas injections across shippers for the gas day, immediately notify the user which method was used and of the result of using that method and as soon as practicable, and notify ("clause 192(2) notice") each shipper to which AEMO allocated some or all of the user's gas injections that AEMO was required under this clause 192(2) to allocate gas to the shipper, of the amount of gas allocated to the shipper and of the name of the user:

Notification format defined in [ICD][UA-SHP – Shipper allocation notification].

Notification format defined in [ICD][UAI-SUBS – User's substitute allocation].

Notification format defined in [ICD][UAI-INV – User's Invalid UAI notification].

- a) if possible, AEMO must use the user's most recent allocation instruction for the sub-network that is valid for the gas day determined using the like day substitution methodology; and
- b) if there is no such allocation instruction, AEMO must use the user's most recent allocation instruction for the sub-network that is valid for the gas day from any previous gas day; and
- c) if there is no such allocation instruction, AEMO must apportion the user's gas injections for the gas day across all of the shippers listed in the shipper register for the user for the sub-network in equal amounts; and
- d) if there are no shippers listed in the shipper register for the user for the sub-network, then AEMO must determine the most recent gas day for which there was at least one shipper listed in the shipper register for the user for the sub-network, and allocate the user's gas injections for the gas day across all of the shippers listed in the shipper register for the user for the sub-network on that gas day in equal amounts.

{Note: If an allocation under any of clauses 192(2)(a) to 192(2)(d) results in a shipper being allocated to supply, or to have supplied, gas to a user in circumstances where the shipper has no other contractual relationship with the user to enable it to charge for the supply, then the fallback user-shipper agreement under clause 193A will fill the gap.}

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(3) If AEMO has been required to allocate a user's gas injections for a gas day for a sub-network using the method set out in clause 192(2)(d), then AEMO must immediately notify the network operator and the ROLR administrator that AEMO was required under clause 192(2)(d) to allocate the user's gas injections for the sub-network to shippers which are not listed in the shipper register for the user for the sub-network.

193 User warranties

(1) By providing an allocation instruction under this Part 5.3, a user warrants and represents to AEMO that:

- a) each of the shippers set out in the allocation instruction agrees to, and has sufficient contractual entitlements to, inject gas on the user's behalf in accordance with the allocation instruction on any gas day to which the allocation instruction applies; and
- b) the user is party to a haulage contract for the sub-network in respect of which the allocation instruction applies.

{Note: Under clause 376A(2), a breach of this warranty will expose the user to liability for more than just direct damage.}

(2) A user makes the warranties in clause 193(1) anew on the gas day before any gas day on which the allocation instruction will apply.

193A. Fallback user-shipper agreement

(1) If a shipper gives AEMO a listing request under clause 173(2)(a) in respect of a user and a sub-network, then:

- a) by giving AEMO the listing request, the shipper is deemed to make an irrevocable offer to the user to enter into a fallback user-shipper agreement in the form set out in Appendix 9 for the sub-network; and
- b) on the first subsequent occasion on which the user gives AEMO an allocation instruction in respect of the sub-network under this Part 5.3 which lists the shipper, the user by giving that allocation instruction is deemed to have irrevocably accepted the offer in clause 193A(1)(a), and the user and the shipper become parties to the fallback user-shipper agreement.

(2) The user named in a deemed contract under a fallback user-shipper agreement must in accordance with the applicable fallback user-shipper agreement pay to the shipper which is a party to the deemed contract all amounts which are payable under the deemed contract.

{Note: The effect of this clause 193A(2) is to make a non-payment by the user a breach of these Procedures, as well as a breach of the fallback user-shipper agreement and the deemed contract. }

Part 5.4 Before the Start of the Gas Day

194 There is no clause 194.

195 There is no clause 195.

196 There is no clause 196.

197 There is no clause 197.

198 There is no clause 198

199 There is no clause 199.

200 There is no clause 200.

201 Forecast for Unaccounted for Gas

(1) For each sub-network for each gas day, at least 18 hours before the start of the gas day, the network operator must provide, by means of automated electronic file, to the data estimation entity the following:

- a) its forecast of UAFG (FUAFG); and
- b) the name of each user who is a supplier of UAFG for the sub-network; and
- c) the quantity of the UAFG forecast to be supplied by each supplier.

FUAFG: Forecast unaccounted for gas

User GBO identifier

Sub-network identifier

Gas day

User's unaccounted for gas

Notification format defined in [ICD][FUAFG – Forecast unaccounted for gas].

(2) The network operator's forecast of UAFG under clause 201(1) must take into account historical levels of UAFG.

202 User provides Interval Meter information to AEMO

(1) For each sub-network for each gas day, at least 18 hours before the start of the gas day, each User must provide, by means of automated electronic file, to AEMO its:

- a) interval-meter demand profile for the gas day;

IMDPROF: Interval-meter demand profile

User GBO identifier

Sub-network identifier

Gas day

Profile

Notification format defined in [ICD][IMDPROF – Interval-meter demand profile].

and its

- b) anticipated user’s interval-metered withdrawals for the gas day

AUIW: *Anticipated user’s interval withdrawal*

User GBO identifier

Sub-network identifier

Gas day

Anticipated user’s interval withdrawal

Notification format defined in [ICD][AUIW – Anticipated user’s interval withdrawal].

203 Network operator provides basic-metered delivery point information

(1) For each basic-metered delivery point in a sub-network, from time to time and at least once per calendar year, the network operator must calculate by linear regression of historical meter reading data the:

- a) non-temperature-sensitive base load; and
- b) temperature sensitivity heating rate,

and advise AEMO of the data calculated under this clause 203 in accordance with clause 27(1)(b).

204 AEMO produces user profiled forecast

(1) For each user for each sub-network for each gas day, AEMO must perform the following steps:

- a) first, calculate the user’s forecast basic-metered withdrawals (“UFBW”) as follows:

$$UFBW = \sum BL + \sum (HR \times HDD)$$

where:

UFBW= the estimated withdrawals for the user’s basic-metered delivery points in the sub-network for the gas day.

BL = the *non-temperature-sensitive base load* for each of the *user’s basic-metered delivery points* provided to the *data estimation entity* under clause 66(f) or clause 203.

HR = the *temperature sensitivity heating rate* for each of the *user’s basic-metered delivery points* provided to the *data estimation entity* under clause 66(f) or clause 203.

HDD = the *heating degree day* for the *HDD zone* for *sub-network* for the *gas day* determined under clause 177.

- b) next calculate the “User’s (basic-meter) profile forecast” as follows:

$$UBPF = DP \times UFBW$$

where:

UBPF = the *user’s basic-meter profile forecast* for the *sub-network* for the *gas day*.

DP = the *profile* for the *heating degree day* for the *sub-network* for the *gas day* as determined in accordance with clause 209

UFBW = the *estimated withdrawals* for the *user’s basic-metered delivery points* in the *sub-network* for the *gas day* as calculated under clause 204(1)(a).

- c) then, take the user’s forecast interval-metered withdrawals for the gas day provided under clause 202 (“UFIW”); and
- d) apply the interval-meter demand profile provided by the user under clause 202 to the UFIW provided under clause 202 to calculate the “user’s (interval-meter) profiled forecast”.

(2) For each user for each sub-network, AEMO must calculate the “user’s profiled forecast” for the gas day, by summing for each hour in the gas day the component for the hour of the following:

$$UPF = UBPF + UIPF + RPF + SPF + UAFGPF$$

where:

UPF = the *user’s profiled forecast* for the *sub-network* for the *gas day*;

UBPF = the *user’s (basic-meter) profiled forecast* for the *sub-network* for the *gas day* calculated under clause 204(1)(b);

UIPF = the *user’s (interval-meter) profiled forecast* for the *sub-network* for the *gas day* calculated under clause 204(1)(d); and

UAFGPF = the *user’s unaccounted for gas profiled forecast* for the *gas day*, calculated by applying a flat 24 hour profile to any quantity of unaccounted for gas to be provided by the user on the gas day as notified under clause 201(1).

(3) For each user for each sub-network for each gas day, AEMO must calculate the “user’s daily forecast” by summing the component for each hour of the user’s profiled forecast for the gas day calculated under clause 204(2).

(4) For each user for each sub-network for each gas day, AEMO must at least 17 hours before the start of the gas day provide to the user:

- a) the *UPF*, *UBPF*, *UIPF* and *UAFGPF* referred to in clause 204(2); and

Notification format defined in [ICD][UPF: User profile forecast].

- b) the heating degree day for the HDD zone for the sub-network for the gas day used in the calculation under clause 204(1)(a).

Notification format defined in [ICD][HDD: Heating degree day].

205 AEMO publishes sub-network profiled forecast

(1) For each sub-network for each gas day, AEMO must:

- a) first, calculate the “sub-network (basic-meter) profiled forecast” for the sub-network for the gas day as follows:

$$NBPF = DP \times \left[\sum UFBW \right]$$

where:

NBPF = the sub-network basic-meter profiled forecast for the gas day for the sub-network;

DP = the profile for the heating degree day for the HDD zone for the sub-network for the gas day determined under clause 209; and

UFBW = the user’s forecast basic-metered withdrawals for the sub-network for the gas day calculated under clause 204(1)(a), and

- b) then, for each hour, the component for the hour of the “sub-network (interval-meter) profiled forecast” is calculated by summing the component for the hour of the user’s (interval-meter) profiled forecast calculated under clause 204(1)(d) for each user in the sub-network for the gas day.

(2) For each hour, the component for the hour of the “sub-network profiled forecast” is calculated by summing the component for the hour of:

- a) the sub-network (basic-meter) profiled forecast for the gas day calculated under clause 205(1)(a); and
- b) the sub-network (interval-meter) profiled forecast for the gas day calculated under clause 205(1)(b); and
- c) the sub-network unaccounted for gas profiled forecast for the gas day, calculated by applying a flat 24 hour profile to the forecast of unaccounted for gas for the sub-network for the gas day notified under clause 201(1).

(3) At least 17 hours before the start of the gas day, for each sub-network AEMO must publish to users in the sub-network and their related shippers and pipeline operators the sub-network profiled forecast.

Notification format defined in [ICD][NPF: Sub-network profile forecast].

206 AEMO produces shipper profiled forecasts for non-STTM sub-networks

(1) For each shipper for each sub-network for each gas day, AEMO must produce a “shipper profiled forecast” for the gas day by:

- a) first, for each user in the sub-network, calculating the “allocation instruction percentage” for each shipper named in the user’s allocation instruction for the gas day, which:
 - (i) if the user’s allocation instruction is expressed solely in terms of percentages — is the same as the percentage allocated to the shipper in the allocation instruction; and
 - (ii) otherwise — is calculated as follows:

$$AIP = \frac{SQ}{(UDF)}$$

where:

AIP = the user’s allocation instruction percentage for the shipper for the sub-network for the gas day; and

UDF = the user’s daily forecast for the sub-network for the gas day calculated under clause 204(3);

and

- b) next, taking each user’s profiled forecast for the gas day calculated under clause 204 and, for each hour, allocating it across shippers:
 - (i) there is no clause 206(b)(i);
 - (ii) for the remainder of the user’s profiled forecast – in accordance with the user’s allocation instruction percentage for the gas day,
 - (iii) and
- c) for each shipper, summing for each hour all amounts allocated to the shipper.

(2) At least 17 hours before the start of the gas day, AEMO must provide each shipper’s shipper profiled forecast to the shipper and to the appropriate pipeline operator.

Notification format defined in [ICD][PPF: Participant profile forecast].

207 AEMO produces pipeline profiled forecasts (for non-STTM sub-networks)

At least 17 hours before the start of the *gas day*, for each *pipeline* for each *sub-network*, AEMO must calculate and provide to the *pipeline operator*, the “**pipeline profiled forecast**” which is equal to the sum, for each hour, of the component for the hour of each *shipper* on the *pipeline’s shippers profiled forecasts* for the *gas day*.

{Note: The market responsive flow control pipeline is unable to measure and control gas injections at flow rates below 400GJ per hour and shippers do not know the hourly nominations of other shippers on this pipeline. As a result, a shipper is unable to procure the injection of less than 400GJ of gas in any hour. The pipeline profiled forecast published by AEMO is therefore unlikely to reflect the actual profile of injections from the market responsive flow control pipeline on a day.}

Notification format defined in [ICD][PPF: Participant Profile Forecast].

208 Users to procure injections from market responsive flow control pipeline that match as closely as possible the user's profiled forecast (MRFC pipelines only) for non-STTM sub-networks

(1) For each sub-network for each gas day, each user must procure its related shippers in the market responsive flow control pipeline to procure the market responsive flow control pipeline operator to inject gas into the sub-network so that:

- a) the injection for each hour matches the user's best estimate, as a reasonable and prudent person, of the share of its likely user's required withdrawals for the sub-network applicable to that hour; and
- b) the sum of the hourly injections across the gas day equals the user's best estimate, as a reasonable and prudent person, of the share of its likely user's required withdrawals for the sub-network for that gas day that the user intends to procure from that shipper,

provided that nothing in this clause 208(1) requires the user to procure a related shipper to procure the market responsive flow control pipeline operator to inject gas at a flow rate less than 400GJ per hour in any hour.

{Note: The market responsive flow control pipeline is unable to measure and control gas injections flow rates below 400GJ per hour and each shipper does not know the hourly nominations of the other shippers on this pipeline. As a result, a shipper is unable to procure the injection of less than 400GJ of gas in any hour. Where a user believes that the share of its likely user's required withdrawals applicable to an hour is such that its related shipper would be required to procure the market responsive flow control pipeline to inject less than 400GJ of gas in an hour, the user may procure its related shipper to procure the market responsive flow control pipeline to inject the gas for that hour during a different hour of the gas day.}

209 AEMO determines profiles

(1) AEMO may determine from time to time, as a reasonable and prudent person, the profiles to be used in this Division 5.4.2.

(2) AEMO must, from time to time, publish guidelines which set out:

- a) the principles on which the profiles referred to in clause 209(1) are based; and
- b) the principles which AEMO applies in the selection of a profile for a gas day; and
- c) AEMO's policy on the retention and management of the profiles referred to in clause 209(1) in a profile library.

Part 5.5 During the Gas Day

210 There is no clause 210.

211 There is no clause 211.

212 There is no clause 212.

213 There is no clause 213.

214 There is no clause 214.

215 There is no clause 215.

216 There is no clause 216.

217 There is no clause 217.

217A Pressure control pipeline to provide instantaneous flow signals

(1) In this clause 217A “instantaneous flow rate” at a gate point means a flow rate measured over the shortest period of time over which the metering equipment at the gate point is capable of measuring a flow rate.

(2) The pipeline operator of a pipeline that is operating as a pressure controlled pipeline for a sub-network with two pipelines connected to it, must under this clause 217A, if requested by the pipeline operator of the other pipeline, provide to the pipeline operator any one or more of the following data signals (each a “flow signal”) communicating the instantaneous flow rate:

- a) at the gate point connecting the pressure control pipeline to the sub-network; and
- a)
- b) if there is more than one physical interconnection between the pressure control pipeline and the sub-network — at each physical interconnection.

{Note: The physical interconnection referred to in clause 217A(2)(b) is usually referred to as a —physical gate point!, whereas the gate point referred to in clause 217A(2)(a) and elsewhere in these Procedures is called a —notional gate point!;} {Example: If there are three physical gate points comprising the gate point, then the pipeline operator must, if requested, make available a maximum of 4 flow signals, one for the gate point and one each for the 3 physical gate points.}

(3) A pipeline operator complies with clause 217A(2) if, acting as a reasonable and prudent person, it provides the flow signal:

- a) in the form of a galvanically isolated 4-20 milliamp current loop or in such other form as the parties as reasonable and prudent persons may agree; and
- b) at a location which provides the other pipeline operator with a secure location to install equipment to receive and transmit the flow signal, together with a power supply for the equipment and reasonable rights of access for the other pipeline operator from time to time to operate and maintain the equipment.

(4) The pipeline operator of a pressure controlled pipeline is not obliged to provide a flow signal until it has reached agreement with the other pipeline operator about the recovery of its costs of complying with this clause 217A, according to the following principles:

- a) the pipeline operator of the pressure control pipeline is entitled to recover all its costs as a reasonable and prudent person of providing the flow signal, in a manner consistent with the National Gas Law;
- b) there is to be no double-recovery of costs under this clause 217A and under any relevant Access Arrangement or agreement.

(5) Clause 217A does not apply in respect of a flow signal being provided in a form and at a location for a sub-network if on 10 November 2003 the flow signal was being provided by the pipeline operator of the pressure controlled pipeline in the form and at the location for the sub-network to the pipeline operator of the other pipeline connected to the sub-network.

Part 5.6 Allocation

218 The period for calculations

(1) Except where a clause states to the contrary, for each gas day D AEMO must perform each calculation it is required to perform under this Part 5.6 for each historical gas day i in the settlement period.

(2) Except where a clause states to the contrary, AEMO must use the value it has most recently received and recorded, or generated and recorded, in the AEMO information system under these Procedures:

- a) for each input into each calculation AEMO is required to perform under this Part 5.6; and
- b) for each notification that AEMO is required to provide to a person under this CHAPTER 5.

(3) For the purposes of clause 218(1):

“settlement period” for gas day D means the period of 425 gas days between 426 gas days before gas day D and one gas day before gas day D; and

“historical gas day i” for gas day D means a gas day in the settlement period for gas day D.

(4) There is no clause 218(4).

219 There is no clause 219.

220 Pipeline injections

(1) For each gate point, the “pipeline injections” for each gas day D are:

- a) for the Adelaide sub-network (2101), the latest version available of pipeline injections as provided by the STTM systems and for all other non-STTM sub-networks, the gate point energy quantity for the gate point provided to AEMO by the network operator under clause 152; and
- b) for instances where the pipeline injections for the Adelaide sub-network (2101) are not yet available from the STTM systems, then pipeline injections for the Adelaide sub-network will be based upon the gate point energy quantity for the gate point provided to AEMO by the network operator under clause 152.

(2) For each gate point for each gas day, AEMO must calculate the “pipeline corrected injections” for each gas day as follows:

$$PCI = PI$$

where:

PCI = the *pipeline corrected injections* for the *gate point* for the *gas day*;

PI = the latest version available of *pipeline injections* for the *gate point* under clause 220(1).

(3) For each gate point in the range of gas day D-1 to gas day D-425, AEMO must notify each user, the network operator and the pipeline operator of the pipeline corrected injections for gas day D used in the calculations under clause 220(2).

221 Total corrected injections

For each sub-network, AEMO must calculate the “total corrected injections” for gas day D as follows:

$$TCI = \sum PCI$$

where: TCI = the total corrected injections for the sub-network for gas day D;

PCI = the latest version available of pipeline corrected injections for each gate point for gas day D calculated under clause 220(2);

222 User’s interval-metered withdrawals

For each *user* for each *sub-network*, AEMO must calculate the “**user’s interval-metered withdrawals**” (“UIW”) for *gas day D* as follows:

$$UIW = \sum IW$$

where:

UIW = the *user’s interval-metered withdrawals* for the *sub-network* for *gas day D*; and

IW = the latest version available of *interval-metered withdrawals* for each of the *user's interval-metered delivery points* in the *sub-network* for *gas day D* provided to AEMO under clause 158(1)(b).

223 Net system load

(1) For each sub-network for each gas day D, AEMO must calculate the net system load for each historical gas day *i* as follows:

$$NSL = TCI - \sum UIW - EUAFG$$

where:

NSL = the net system load for the sub-network for historical gas day *i* for gas day D;

TCI = the latest version available of total corrected injections for the sub-network for historical gas day *i* for gas day D calculated under clause 221;

UIW = the latest version available of interval-metered withdrawals for historical gas day *i* for gas day D for each user in the sub-network calculated under clause 222; and

EUAFG = the estimate of unaccounted for gas for the sub-network for historical gas day *i* for gas day D notified under clause 229(1), as applicable. {Note: The EUAFG may be a negative number.}

(2) If AEMO's calculation of net system load for any historical gas day *i* for gas day D under clause 223(1) produces a negative number or AEMO does not receive an estimate of unaccounted for gas for the sub-network for gas day D under clause 229(1), AEMO must:

- a) instead of calculating net system load as set out in clause 223(1), determine the net system load for the gas day using the like day substitution methodology; and
- b) calculate a "revised estimate of unaccounted for gas" to use in its calculations under this clause 223(2) as follows:

$$RUAFG = TCI - \sum UIW - NSL$$

where:

RUAFG = the revised estimate of unaccounted for gas for the sub-network for gas day D;

TCI = the latest version available of total corrected injections for the sub-network for gas day D calculated under clause 221;

UIW = the latest version available of interval-metered withdrawals for the sub-network for gas day D for each user in the sub-network calculated under clause 222; and

NSL = the latest version available of net system load for the sub-network calculated under clause 223(2)(a) for gas day D, and

- c) for each user notified to AEMO as a supplier of UAFG for the sub-network under clause 229(1) for the most recent gas day for which no revised estimate

of unaccounted for gas was required to be calculated under this clause 223(2) (“last valid day”), calculate, and within 4.5 hours after the end of the gas day advise the user and the network operator of, the “revised user’s unaccounted for gas” as follows:

$$RUUAFG_u = \frac{UAFG_u}{\sum_{All\ users} UAFG} \times RUAFG$$

where:

$RUUAFG_u$ = the revised user’s unaccounted for gas for the user u for the sub-network for gas day D ; $UAFG_u = UAFG$ for the user u ;

$UAFG$ = for a user, the quantity of the $UAFG$ estimated to be supplied by the user notified under clause 229(1) for gas day D ; and

$RUAFG$ = the revised unaccounted for gas for the sub-network for gas day D calculated under clause 223(2)(b).

Provided that, if:

$$\sum_{All\ users} UAFG_u = zero$$

then AEMO must calculate the “revised user’s unaccounted for gas” for each user using the values for $UAFG_u$ and

$$\sum_{All\ users} UAFG_u \text{ from the previous gas day on which}$$

$$\sum_{All\ users} UAFG_u \text{ was not equal to zero.}$$

(3) If a value for revised user’s unaccounted for gas is calculated under clause 223(2)(c), that value is thereafter to be used in this CHAPTER 5 in place of the corresponding user’s unaccounted for gas value before the revision.

(4) For each sub-network in the range of gas day $D-1$ to gas day $D-425$, AEMO must notify each user and the network operator of the net system load for gas day D and for each historical gas day i as calculated under clause 223(1).

Notification format defined in [ICD][NORM-NSL: Net System Load].

224 Raw estimate of basic-metered delivery points withdrawals

For each basic-metered delivery point for each sub-network, AEMO must calculate a raw estimated basic-metered withdrawal for gas day D as follows:

- a) there is no clause 224(a)
- b)

$$REBW = BL + (HR \times HDD)$$

where: REBW = the raw estimated basic-metered withdrawal for the basic-metered delivery point for gas day D;

BL = the non-temperature-sensitive base load for the basic-metered delivery point provided to AEMO under clause 66(f) or clause 203;

HR = the temperature sensitivity heating rate for the basic-metered delivery point provided to AEMO under clause 66(f) or clause 203; and

HDD_A = the actual heating degree day for the HDD zone for the sub-network for gas day D calculated under clause 177.

225 Normalisation factor for estimate of basic-metered delivery points withdrawals

(1) For each sub-network for each gas day D, AEMO must calculate a “normalisation factor” for the basic-metered delivery points in the sub-network for each historical day i as follows:

$$NF = \frac{NSL}{\sum REBW}$$

where:

NF = the normalisation factor for the basic-metered delivery points in the sub-network for historical gas day i for gas day D;

NSL = the net system load for the sub-network for historical gas day i for gas day D calculated under clause 223; and

REBW = the raw estimated basic-metered withdrawal for each basic-metered delivery point in the sub-network for historical gas day i for gas day D calculated under clause 224.

(2) For each sub-network in the range of gas day D-1 to gas day D-425, AEMO must notify each user and the network operator of the normalisation factor for each of the basic-metered delivery points in the sub-network as calculated under clause 225(1).

Notification format defined in [ICD][NORM-NSL: Net System Load].

226 Estimated basic-metered withdrawal for each basic-metered delivery point

(1) For each basic-metered delivery point for each sub-network, AEMO must calculate the “estimated basic-metered withdrawal” for gas day D as follows:

$$EBW = REBW \times NF$$

where:

EBW = the estimated basic-metered withdrawal for the basic metered delivery point for gas day D;

NF = the normalisation factor for basic-metered delivery points in the sub-network for gas day D calculated under clause 225; and

REBW = the raw estimated basic-metered withdrawal for the basic-metered delivery point for gas day D calculated under clause 224.

(2) For each basic-metered delivery point for each sub-network, in the range of gas day D-1 to gas day D-425, AEMO must notify each user and the network operator of the estimated basic-metered withdrawals for each basic-metered delivery point as calculated under clause 226(1).

227 User’s estimated basic-metered withdrawals

For each user for each sub-network, AEMO must calculate the “user’s estimated basic-metered withdrawals” (“UEBW”) for gas day D as follows:

$$UEBW = \sum EBW$$

where:

UEBW = the user’s estimated basic-metered withdrawals for the sub-network for gas day D; and

EBW = the estimated basic-metered withdrawal for each of the user’s basic metered delivery points for the sub-network for gas day D calculated under clause 226

227A. Distributed actual basic-metered withdrawals

(1) For each basic-metered delivery point for each gas day D on which AEMO receives a meter reading from which an actual value is calculated (“latest read”) for the basic-metered delivery point, AEMO must determine the “distributed actual basic-metered withdrawals” (“DABW”) for each gas day in the metering period (including the gas day of the latest read) as follows:

- a) first, calculate the “Net System Load Factor” (“NSL”) for each gas day i as follows:

$$NSLF_i = \frac{NSL_i}{\sum NSL}$$

$NSLF_i$ = the net system load factor for the sub-network for gas day i ;

NSL_i = the net system load for the sub-network for gas day i calculated under clause 223; and

NSL = the net system load for the sub-network for each gas day in the metering period calculated under clause 223.

- b) then calculate the —distributed actual basic-metered withdrawal” (“DABW”) for the basic-metered delivery point for gas day i as follows:

$$DABW_i = NSLF_i \times AQ$$

where:

$DABW_i$ = the distributed basic-metered withdrawal for the basic-metered delivery point for gas day i ;

$NSLFi$ = the net system load factor for the sub-network for gas day i ; and

AQ = energy quantity of gas shown by the latest read as being withdrawn at the basic-metered delivery point during the metering period.

(2) For each basic-metered delivery point for each gas day D on which AEMO calculates a net system load (“revised net system load”) under clause 223 for a historical gas day i that is different to the net system load calculated for the historical gas day i on gas day $D-1$ under clause 223 (“original net system load”), AEMO must, in accordance with clause 227A(1)(b), recalculate the “distributed actual basic-metered withdrawals” (“DABW”) for each gas day in the metering period in which the historical gas day i falls, using the revised net system load in place of the original net system load.

227B. User’s distributed basic-metered withdrawals

(1) For each user for each sub-network for each gas day D , AEMO must calculate the “user’s distributed basic-meter withdrawal” (“UDBW”) for each historical gas day i as follows:

$$UDBW = \sum DABW + \sum EBW$$

where:

$UDBW$ = the *user’s distributed basic-metered withdrawals* for the *sub-network* for gas day D ;

$DABW$ = the sum of distributed actual basic-metered withdrawals for each of the user’s basic metered delivery points for which there is a meter reading available for the sub-network for gas day D calculated under clause 227A; and

EBW = the sum of estimated basic meter withdrawals for each of the user’s basic-metered delivery points for which there is no meter reading available for the sub-network for gas day D calculated under clause 226.

(2) For each user for each sub-network in the range of gas day $D-1$ to gas day $D-425$, AEMO must notify each user and the network operator of the user’s distributed basic-metered withdrawals for each basic-metered delivery point for gas day D as calculated under clause 227B(1).

Notification format defined in [ICD][UETW-HST: Historical User withdrawal data]

227C. User’s actual unaccounted for gas

(1) For each user for each sub-network AEMO must determine for each historical gas day i the user’s actual unaccounted for gas (“UAUAFG”) for gas day D as follows:

$$UAUAFG = \frac{UAFG}{EAFG} \times UAFG$$

where:

$UAUAFG$ = user's actual unaccounted for gas for gas day D ;

$UAFG$ = the amount of $UAFG$ supplied by the user for gas day D which was notified under clause 229;

$EUAFG$ = estimate of unaccounted for gas calculated under clause 223; and

$UAFG$ = actual unaccounted for gas calculated under clause 230 for gas day D

(2) For each user for each sub-network in the range of gas day $D-1$ to gas day $D-425$, AEMO must notify each user and the network operator of the user's actual unaccounted for gas for each historical gas day i as calculated under clause 227C(1).

Notification format defined in [ICD][UETW-HST: Historical User withdrawal data]

228 User's estimated total withdrawals

(1) For each user for each sub-network AEMO must determine the user's estimated total withdrawals for gas day D as follows:

$$UETW = UIW + UDBW + UAUAFG$$

where:

$UETW$ = the user's estimated total withdrawals for the sub-network for gas day D ;

UIW = the user's interval-metered withdrawals for gas day D calculated under clause 222;

$UDBW$ = the user's distributed basic-metered withdrawals for gas day D calculated under clause 227B; and

$UAUAFG$ = the user's actual unaccounted for gas for gas day D notified under clause 227C;

(2) For each user for each sub-network, within 4 hours after the end of gas day D , AEMO must notify the user and the relevant network operator of the user's estimated total withdrawals for gas day D calculated under clause 228(1) and the amount of each component of the user's estimated total withdrawals.

(3) For each user for each sub-network for each gas day D , within 4 hours after the end of gas day D , AEMO must notify the user of the interval-metered withdrawals for each of the user's interval-metered delivery points in the sub-network provided to AEMO on each gas day in the period between gas day D and gas day $D-6$ under clause 158(1)(b); and

(4) For each user for each sub-network, in the range of gas day $D-1$ to gas day $D-425$, AEMO must recalculate the user's estimated total withdrawals where there has been an update to the meter values.

Notification format defined in [ICD][UETW-HST: Historical User withdrawal data]

229 Estimate of unaccounted for gas

(1) For each sub-network for each gas day, within 3.5 hours after the end of the gas day, the network operator must advise AEMO of its estimate of UAFG (which may later be revised under clause 223(2)) (“EUAFG”), the name of each user who is a supplier of UAFG for the sub-network and the quantity of the UAFG estimated to be supplied by each supplier.

(2) The amount of UAFG supplied on a gas day by a user which was notified under clause 229(1) is the user’s UAFG (“UUAFG”) for the gas day.

(3) The network operator’s estimate of UAFG under clause 229(1) must:

- a) take into account historical levels of UAFG; and
- b) be a number that results in the net system load calculated by AEMO under clause 223(1) being zero or a positive number.

Notification format defined in [ICD][UUAFG – Users Unaccounted For Gas]

230 AEMO calculates actual UAFG

(1) For each sub-network for each gas day D, AEMO must calculate the “actual UAFG” for gas day D-1 through D-425 inclusive (each of which is a “historical UAFG day”) as follows:

$$UAFG = \sum PI - \sum UIW - \sum UBW$$

where:

UAFG = the latest version available of *actual UAFG* for the *sub-network* for gas day *D* for the *historical UAFG day*;

PI = the latest version available of *pipeline injections* for the *gate point* provided to AEMO under clause 220(1);

UIW = the *user’s interval-metered withdrawals* for each *user* for the *sub-network* for the *historical UAFG day* calculated under clause 222; and

UBW = the —**user’s basic-metered withdrawals**” for each *user* for the *sub-network* for the *historical UAFG day* calculated as follows:

$$UBW = \sum DABW + \sum EBW$$

where:

UBW = the latest version available of *user’s basic-metered withdrawals* for all of the *user’s basic-metered delivery points* for the *sub-network* for the *historical UAFG day*;

DABW = the latest version available of *distributed actual basic-metered withdrawal* for each of the *user’s basic-metered delivery points* in the *sub-network* for the *historical UAFG day*; and

EBW = for each of the *user’s basic-metered delivery points* in the *sub-network* for which a *distributed actual basic-metered withdrawal* is unavailable, the latest version

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available of *estimated basic-metered withdrawal* at the *basic-metered delivery point* for the *historical UAFG day*.

(2) Within 24 hours after the end of gas day D, AEMO must notify the network operator and each user who is a supplier of UAFG for the sub-network of the UAFG calculated under clause 230(1).

Notification format defined in [ICD][AUAFG: Actual Unaccounted For Gas]

Part 5.7 There is no Part 5.7

231 There is no clause 231.

232 There is no clause 232.

233 There is no clause 233.

234 There is no clause 234.

235 There is no clause 235.

236 There is no clause 236.

237 There is no clause 237.

238 There is no clause 238.

239 There is no clause 239.

240 There is no clause 240.

241 There is no clause 241.

242 There is no clause 242.

243 There is no clause 243.

244 There is no clause 244.

245 There is no clause 245.

Part 5.8 Deemed Injections

246 Calculate shipper's deemed injections for non-STTM sub-networks

(1) For each shipper for each gate point for each gas day, in the range of gas day D-1 to gas day D-425, after the end of the fourth business day of each month, AEMO must calculate, and advise the shipper and the pipeline operator of the shipper's deemed injections by:

- a) first, for each user in the sub-network, taking the latest version available of user's estimated total withdrawals in the sub-network for the gas day calculated under clause 228 and allocating it across:

- (i) there is no clause 246(a)(i).

- (ii) for the remainder of the user's estimated total withdrawals – in accordance with the user's allocation instruction for the gas day under clause 188;

and

- b) then summing all amounts allocated by user to the shipper under clause 228(1)(a).

(2) To avoid doubt, if clause 178 requires a user to procure the injection into the sub-network of a negative amount of gas on a gas day, that negative amount may result in a negative shipper's deemed injection for the gas day.

{Note: Any negative *shipper's deemed injection* may be resolved between the *user* and its *related shipper*, between the *shipper* and the *pipeline operator* or by an arrangement with another *user*.}

247 There is no clause 247.

248 Calculate user's deemed withdrawals for a pipeline

(1) For each user for each gate point for each gas day, within 7 hours after the end of the gas day, AEMO must calculate, and notify the user and the network operator of the user's deemed withdrawals ("UDW") by:

- a) first, taking the latest version available of user's estimated total withdrawals for the sub-network for the gas day calculated under clause 228 and allocating it across the user's related shippers:

- (i) there is no clause 248(1)(a)(i).

- (ii) for the remainder of the user's estimated total withdrawals – in accordance with the user's allocation instruction for the gas day under clause 188;

and

- b) then, summing the amounts calculated under clause 248(1)(a) in respect of all of the user's related shippers for the gate point.

(2) To avoid doubt, if clause 178 requires a user to procure the injection into the sub-network of a negative amount of gas on a gas day, that negative amount may result in negative user's deemed withdrawals for the gas day.

{Note: Any negative user's deemed withdrawals may be resolved between the user and its related shipper, between the shipper and the pipeline operator or by an arrangement with another user.}

Part 5.9 There is no Part 5.9

249 There is no clause 249.

250 There is no clause 250.

251 There is no clause 251.

252 There is no clause 252.

Part 5.10 There is no Part 5.10

253 There is no clause 253.

254 There is no clause 254.

255 There is no clause 255.

256 There is no clause 256.

257 There is no clause 257.

258 There is no clause 258.

259 There is no clause 259.

260 There is no clause 260.

261 There is no clause 261.

262 There is no clause 262.

263 There is no clause 263.

264 There is no clause 264.

265 There is no clause 265.

266 There is no clause 266.

Part 5.11 There is no Part 5.11

267 There is no clause 267.

268 There is no clause 268.

269 There is no clause 269.

270 There is no clause 270.

271 There is no clause 271.

272 There is no clause 272.

273 There is no clause 273.

274 There is no clause 274.

275 There is no clause 275.

276 There is no clause 276.

Part 5.12 There is no Part 5.12

277 There is no clause 277.

278 There is no clause 278.

279 There is no clause 279.

280 There is no clause 280.

281 There is no clause 281.

282 There is no clause 282.

283 There is no clause 283.

284 There is no clause 284.

285 There is no clause 285.

286 There is no clause 286.

287 There is no clause 287.

288 There is no clause 288.

288A. There is no clause 288A.

289 There is no clause 289.

290 There is no clause 290.

291 There is no clause 291.

292 There is no clause 292.

293 There is no clause 293.

294 There is no clause 294.

295 There is no clause 295.

296 There is no clause 296.

296A. There is no clause 296A.

297 There is no clause 297.

298 There is no clause 298.

299 There is no clause 299.

300 There is no clause 300.

Part 5.12A There is no Part 5.12A

300A. There is no clause 300A

Part 5.12B Gas Emergencies

300B. Commencement of a gas emergency

(1) If a gas emergency occurs, then AEMO must as soon as practicable:

- a) notify all participants, pipeline operators, shippers and interested persons that a gas emergency has occurred, the nature of the gas emergency and the gate points affected by the gas emergency;
- b) there is no clause 300B(1)(b);
- c) there is no clause 300B(1)(c).

(2) There is no clause 300B(2).

300C. There is no clause 300C.

300D. There is no clause 300D

300E. There is no clause 300E.

300F. There is no clause 300F.

300G. There is no clause 300G

Part 5.13 Data Failure

301 Data failure

(1) If AEMO does not receive the relevant data for an interval metered delivery point as required under clause 158 to calculate the net system load for a sub-network under clause 223, AEMO must estimate the user's withdrawals at the interval metered delivery point using the like day substitution methodology.

(2) If AEMO does not receive gate point metering data from a network operator for a gate point for a gas day by the time specified in clause 152(1)(b), then AEMO must estimate the gate point metering data using the nomination estimation methodology and record that AEMO has used an AEMO generated estimate in the allocation and reconciliation results for the relevant gas day.

(3) Whenever AEMO is required under this clause 301 to estimate a value, then AEMO may use the estimated value (in place of the value which was not received) wherever necessary under these Procedures.

301A. Manifest data errors and recalculation of gas day results

[Note: If AEMO or any other participant becomes aware of a manifest error the party may advise the network operator of the error.]

(1) If on gas day D the network operator becomes aware of a manifest error in the data it has provided to AEMO on gas day D under either clause 152 or 158 in respect of gas day D – 1 it may notify AEMO that it reasonably believes there is a manifest error in the data it has provided. Such notification must include at least the following:

- a) the clause under which the data containing the manifest error was provided to AEMO; and
- b) if the manifest data error relates to data provided to AEMO under clause 152, the gate point for which the gate point metering data is erroneous; or
- c) if the manifest data error relates to data provided to AEMO under clause 158, the MIRN for which the interval meter data is erroneous; and
- d) the relevant gas day.

(2) By submitting a notification to AEMO under clause 301A(1) the network operator warrants that the notification is not fraudulent, frivolous or vexatious.

(3) On receipt of a notice under clause 301A(2), AEMO must:

- a) forthwith notify all participants, shippers and pipeline operators that the allocation and reconciliation produced by AEMO under Parts 5.4 to 5.12 (inclusive) of the Procedures for the relevant sub-network and gas day is suspected of containing manifest errors; and
- b) forthwith stop the operation of the AEMO information system components that produce the allocation, reconciliation results; and

AEMO will not be required to comply with the timing requirements for the provision of *notices* and publication of information under Parts 5.6, 5.7, 5.8 and 5.12 in respect of the *affected gas day* and each following *gas day* up to but not including the *gas day* on which AEMO has complied with its obligation under clause 301A(5), 301A(6) or 301A(7) (whichever is applicable).

(4) Following receipt of a notice from AEMO under clause 301A(3):

- a) if the manifest data error relates to gate point metering data provided under clause 152, the pipeline operator for the gate point to which the notice relates

must use its reasonable endeavours to determine if the gate point metering data was erroneous and:

- (i) if the gate point metering data was not erroneous notify AEMO as soon as reasonably practicable that the gate point metering data was correct; or
 - (ii) obtain amended physical gate point metering data and provide the amended physical gate point metering data to the network operator within 51.5 hours of the start of the affected gas day. For the avoidance of doubt, any amended physical gate point metering data may be revised estimated values;
 - (iii) or
- b) if the manifest data error relates to interval meter data provided under clause 158, the network operator for the interval meter to which the notice relates must use its reasonable endeavours to determine if the interval metering data was erroneous and:
- (i) if the interval metering data was not erroneous, notify AEMO as soon as reasonably practicable that the interval metering data was correct; or
 - (ii) obtain amended interval metering data and provide the amended interval metering data to AEMO within 51.5 hours of the start of the affected gas day. For the avoidance of doubt, any amended interval metering data may be revised estimated values.

(5) If the pipeline operator notifies AEMO under clause 301A(4)(a)(i) or the network operator notifies AEMO under clause 301A(4)(b)(i) that the data for gas day D – 1 was not erroneous, then AEMO must notify all participants, shippers and pipeline operators that the relevant party has confirmed that the relevant data was correct and, therefore, that the initial results produced by AEMO in respect of gas day D – 1 and each subsequent gas day for which results have been published by AEMO remain valid.

(6) If the network operator does not provide amended interval meter data or amended gate point metering data within 51.5 hours of the start of the affected gas day, AEMO must notify all participants, shippers and pipeline operators that it did not receive any updated interval metering data and, therefore, that the initial results published by AEMO in respect of gas day D – 1 and each subsequent gas day for which results have been published by AEMO remain valid.

(7) If the network operator provides AEMO with amended gate point metering data or interval metering data for gas day D – 1 within 51.5 hours of the start of the affected gas day AEMO must:

- a) as soon as practicable recalculate the allocation and reconciliation g results for gas day D – 1 and any other gas day subsequent to gas day D – 1 and prior to the gas day on which the relevant amended data for gas day D – 1 was provided by the network operator; and

- b) publish the recalculated results to the relevant participants, shippers and pipeline operators according to Parts 5.4 to 5.12 (inclusive) of the Procedures.

Nothing in this clause 301A relieves a *participant, shipper or pipeline operator* from its obligations under Chapter 5.

301B. There is no clause 301B.

301C. Estimated gate point metering data and recalculation of gas day results where difference between estimated and actual data exceeds the gate point estimation recalculation threshold

(1) AEMO must, after consultation with all *participants* operating in SA, publish a *gate point estimation recalculation threshold value*.

(2) If for a *gas day* (“**affected gas day**”):

- a) AEMO receives estimated gate point metering data from the network operator under clause 152(3) for a gate point or is required to calculate the gate point metering data under clause 301(2) for a gate point;
- b) there is no clause 301C(2)(b);
- c) within 51.5 hours after the end of the affected gas day the network operator provides actual gate point metering data for relevant gate point for the affected gas day; and
- d) the difference between the estimated gate point metering data for the affected gas day and the actual gate point metering data provided by the network operator is equal to or greater than the gate point estimation recalculation threshold value,

then AEMO must forthwith notify all participants, shippers and pipeline operators that:

- e) the gate point metering data for the affected gas day was estimated;
- f) AEMO has received actual gate point metering data for the affected gas day and the difference between the estimated gate point metering data for the affected gas day and the actual gate point metering data provided by the network operator is equal to or greater than the gate point estimation recalculation threshold value; and
- g) AEMO intends to initiate recalculation of the allocation and reconciliation results for the affected gas day.

(3) As soon as practicable after issuing a notice under clause 301C(1), AEMO must:

- a) as soon as practicable recalculate the allocation and reconciliation results for the affected gas day and any other gas day subsequent to the affected gas day and prior to the gas day on which the actual gate point metering data was provided by the network operator; and

- b) publish the recalculated results to the relevant participants, shippers and pipeline operators according to Parts 5.4 to 5.12 (inclusive) of the Procedures.

(4) AEMO will not be required to comply with the timing requirements for the provision of notices and publication of information under Parts 5.6, 5.7, 5.8 and 5.12 in respect of the affected gas day and each following gas day up to but not including the gas day on which AEMO has complied with its obligation under clause 301C(2).

(5) Nothing in this clause 301C relieves a participant, shipper or pipeline operator from its obligations under Chapter 5

Part 5.14 Miscellaneous Provisions

302 Multi shipper allocation agreement

(1) Subject to clause 302(5), this clause applies to a gate point if a transmission contract or Access Arrangement requires an agreement between all shippers who receive gas from the pipeline operator at the gate point (sometimes known as a “multi-shipper allocation agreement”), regarding how actual deliveries of gas at the gate point are apportioned between shippers.

(2) The allocations which will apply as the multi-shipper allocation agreement for the gate point for each gas day are as follows:

- a) there is no clause 302(2)(a)
- b) each shipper is deemed to have taken delivery of its shippers deemed injection for the gas day for the pipeline which interconnects to the gate point, calculated under clause 246;
- c) there is no clause 302(2)(c)

(3) For each pipeline for each sub-network for each gas day, within 5 hours after the end of the gas day, AEMO must:

- a) provide to the pipeline operator a “multi-shipper allocation report” setting out the information referred to in clause 302(2) for each shipper on the pipeline; and
- b) provide to each shipper on the pipeline, a shipper’s “multi-shipper allocation report” setting out the information referred to in clause 302(2) for the shipper.

(4) To avoid doubt, if clause 178 requires a user to procure the injection or repayment into the sub-network of a negative amount of gas on a gas day, that negative amount is to be included in the calculations for the multi-shipper allocation agreement and may result in a shipper having a negative deemed injection for the gas day.

(5) There is no clause 302(5).

303 There is no clause 303.

304 Recovery from AEMO Failure

(1) If for any period of time on any day that is not a *business day*, AEMO cannot perform its obligations under this CHAPTER 5 because of failure of the *AEMO information system* (each a “**system down time**”), then:

- a) as soon as practicable after the system down time occurs AEMO must rectify the system failure.
- b) on the day the system failure is rectified AEMO must, as soon as practicable, provide the information it is required to provide under this CHAPTER 5 for each gas day during the system down time up to and including the gas day on which the information is provided. The information must be provided in chronological order.

(2) If the system failure only affects the input of information into AEMO, then AEMO will perform for each gas day during the system down time the calculations described in this CHAPTER 5 using estimates for each piece of data that it does not receive under these Procedures..

305 There is no clause 305.

306 Maintenance and accessibility of AEMO data

AEMO must *maintain* all data collected, received, generated or sent to any person by AEMO under this CHAPTER 5 and any data that is the result of AEMO’s latest final calculations for a *gas day*:

- a) in a format that identifies:
 - (i) the time and date the data was collected, received, generated or sent by AEMO; and
 - (ii) the person from whom AEMO collected or received the data, or to whom AEMO sent the data, or if AEMO generated the data, AEMO is identified as having generated the data, and
- b) for at least 2 years, in a format that is accessible within 2 business days to enable the repeated performance of calculations AEMO is responsible for performing under this CHAPTER 5 for any of and up to the previous 425 gas days; and
- c) at least another 5 years after that, in a format which is accessible within 5 business days.

307 Treatment of gas injections under haulage contracts

(1) Despite anything contained in a *haulage contract*, this CHAPTER 5 governs:

- a) how the gas injected into a sub-network on a gas day is allocated between users; and
- b) how a user must reconcile any difference between the quantity of gas that the user injects or procures for injection into a sub-network on a gas day and the quantity of gas withdrawn by the user from the sub-network,

and in the event of inconsistency between a *haulage contract* and CHAPTER 5, CHAPTER 5 prevails to the extent of the inconsistency.

(2) To avoid doubt in relation to Part 5.2, the network operator and the user recognise that at any point in time the quantity of gas that the user has injected or procured for injection into a sub-network is unlikely to precisely equal the quantity of gas withdrawn by the user from the sub-network. However, the user must ensure that the quantity of gas that the user has injected or procured for injection into a sub-network equals the quantity of gas withdrawn by the user from the sub-network in accordance with CHAPTER 5.

(3) A user and a network operator who enter into a haulage contract that is inconsistent with CHAPTER 5 after the time that CHAPTER 5 of the Procedures becomes binding on the user and network operator must amend the haulage contract as required to remove the inconsistency.

308 There is no clause 308.

6. COMPLIANCE AND INTERPRETATION

Part 6.1 There is no Part 6.1

309 There is no clause 309.

310 There is no clause 310.

311 There is no clause 311.

312 There is no clause 312.

313 There is no clause 313.

314 There is no clause 314.

315 There is no clause 315.

316 There is no clause 316.

317 There is no clause 317.

318 There is no clause 318.

319 There is no clause 319.

320 There is no clause 320.

321 There is no clause 321.

Part 6.2 There is no Part 6.2

322 There is no clause 322.

323 There is no clause 323.

324 There is no clause 324.

Part 6.3 Matters Referred to AEMO

{Note: The purpose of this Part 6.3 which imposes a requirement that matters be referred to AEMO so that AEMO can then determine whether the matter should be referred to the AER, is:

(a) to provide a speedy mechanism to resolve minor matters without referral to the AER; and

(b) to impose a filter which discourages the referral of vexatious or frivolous claims to the AER.}

No [BS] requirement. Refer to [RMP] for context only.

325 Matters referred to AEMO

No [BS] requirement. Refer to [RMP] for context only.

326 Withdrawal of referral

No [BS] requirement. Refer to [RMP] for context only.

327 AEMO may give notice to participants

No [BS] requirement. Refer to [RMP] for context only.

328 AEMO to determine procedures

No [BS] requirement. Refer to [RMP] for context only.

328A. AEMO may investigate alleged breaches

No [BS] requirement. Refer to [RMP] for context only.

329 Determinations which may be made

No [BS] requirement. Refer to [RMP] for context only.

330 Notification of determinations

No [BS] requirement. Refer to [RMP] for context only.

331 There is no clause 331.

Part 6.4 There is no Part 6.4

332 There is no clause 332.

333 There is no clause 333.

334 There is no clause 334.

335 There is no clause 335.

336 There is no clause 336.

337 There is no clause 337.

338 There is no clause 338.

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340 There is no clause 340.

341 There is no clause 341.

342 There is no clause 342.

343 There is no clause 343.

344 There is no clause 344.

345 There is no clause 345.

346 There is no clause 346.

347 There is no clause 347.

348 There is no clause 348.

7. REPORTING AND AUDITS

Part 7.1 Explicit Informed Consent

349 Requirements for explicit informed consent

No [BS] requirement. Refer to [RMP] for context only.

Part 7.2 Audit

350 There is no clause 350.

351 Audit of AEMO

No [BS] requirement. Refer to [RMP] for context only.

352 Audit of network operator's metering responsibilities

No [BS] requirement. Refer to [RMP] for context only.

353 Auditor's qualifications etc

No [BS] requirement. Refer to [RMP] for context only.

354 Auditor's conflict of interest

No [BS] requirement. Refer to [RMP] for context only.

355 Terms of auditor's retainer

No [BS] requirement. Refer to [RMP] for context only.

356 Confidentiality

No [BS] requirement. Refer to [RMP] for context only.

357 Participants, AEMO, pipeline operators and prescribed persons must cooperate with auditor

No [BS] requirement. Refer to [RMP] for context only.

358 Audit report

No [BS] requirement. Refer to [RMP] for context only.

359 Level of Audit

No [BS] requirement. Refer to [RMP] for context only.

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360 AEMO's audit summary report

No [BS] requirement. Refer to [RMP] for context only.

Part 7.3 Other provisions regarding records

361 Records needed by AEMO to meet reporting obligations

No [BS] requirement. Refer to [RMP] for context only.

Part 7.4 Report on use of GPMD estimates

361A. Report on use of GPMD estimates

No [BS] requirement. Refer to [RMP] for context only.

8. – ADMINISTRATION

Part 8.1 There is no Part 8.1

362 There is no clause 362.

362A. There is no clause 362A.

Part 8.2 Confidentiality

363 Confidentiality obligations

No [BS] requirement. Refer to [RMP] for context only.

364 Exceptions to confidentiality requirements

No [BS] requirement. Refer to [RMP] for context only.

365 Conditions on disclosure of confidential information

No [BS] requirement. Refer to [RMP] for context only.

366 Confidentiality indemnity

No [BS] requirement. Refer to [RMP] for context only.

Part 8.3 There is no Part 8.3

367 There is no clause 367.

368 There is no clause 368.

369 There is no clause 369.

370 There is no clause 370.

371 There is no clause 371.

372 There is no clause 372.

Part 8.4 Small Use Customer and Small Use Customer Indicator Determination

373 There is no clause 373.

373A. Small use customer determination

The classification of a "*small use customer*" is as set out in the *Gas Regulations 1997* (SA).

373B. AEMO to determine the small use customer indicator

(1) There is no clause 373B(1).

(2) Upon receipt of a valid new connection notice for a basic-metered delivery point, AEMO must determine the small use customer indicator for the delivery point by:

- a) having regard to the information provided by the network operator in the new connection notice under clause 66(f); and
- b) using the sum of the actual heating degree days calculated under clause 177 for each of the previous 365 gas days for the HDD zone.

(3) Within 5 business days of the end of each six month period, with the first six month period commencing on the go-live date, AEMO must determine the small use customer indicator for each basic-metered delivery point by having regard to:

- a) where available, the gas consumed by the customer at the delivery point for the previous 12 month period; or
- b) otherwise, in accordance with the determination made by AEMO under clause 373B(2) or AEMO's previous six month determination made under this clause 373B(3).

{Note: Upon making a determination under this clause 373B, AEMO must update the AEMO registry under clause 52(c) and provide the user and network operator with the AEMO standing data for the delivery point under clause 53(1).}

Part 8.5 Limitation of Liability

374 No liability for as-retrieved data

No [BS] requirement. Refer to [RMP] for context only.

375 No liability for acting in reliance on data provided by others

No [BS] requirement. Refer to [RMP] for context only.

376 Liability for direct damage only

No [BS] requirement. Refer to [RMP] for context only.

376A Liability for indirect damage in certain circumstances only

No [BS] requirement. Refer to [RMP] for context only.

376B Fraud

No [BS] requirement. Refer to [RMP] for context only.

376C Extended scope of this part

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No [BS] requirement. Refer to [RMP] for context only.

376D No third party benefit

No [BS] requirement. Refer to [RMP] for context only.

377 AEMO's limitation of liability

No [BS] requirement. Refer to [RMP] for context only.

377A Indemnifying AEMO

No [BS] requirement. Refer to [RMP] for context only.

Part 8.6 Exiting the Market

377B Exiting the market

No [BS] requirement. Refer to [RMP] for context only.

9. –THERE IS NO CHAPTER 9

Part 9.1 There is no Part 9.1

378 There is no clause 378.

378A There is no clause 378A.

378B There is no clause 378B.

379 There is no clause 379.

380 There is no clause 380.

381 There is no clause 381.

382 There is no clause 382.

Part 9.2 There is no Part 9.2

383 There is no clause 383.

384 There is no clause 384.

385 There is no clause 385.

386 There is no clause 386.

387 There is no clause 387.

388 There is no clause 388.

389 There is no clause 389.

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391 There is no clause 391.

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393 There is no clause 393.

394 There is no clause 394.

395 There is no clause 395.

396 There is no clause 396.

396A There is no clause 396A.

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397 There is no clause 397.

398 There is no clause 398.

399 There is no clause 399.

399A There is no clause 399A.

400 There is no clause 400.

400A. There is no clause 400A.

401 There is no clause 401.

402 There is no clause 402.

10. – GENERAL PROVISIONS

403 Other laws and instruments

No [BS] requirement. Refer to [RMP] for context only.

404 Continuing performance

No [BS] requirement. Refer to [RMP] for context only.

405 Waiver

No [BS] requirement. Refer to [RMP] for context only.

406 Remedies

No [BS] requirement. Refer to [RMP] for context only.

407 There is no clause 407.

11. - RETAILER OF LAST RESORT

408 Creation, Maintenance and Administration of Customer Data.

- a) AEMO must create, maintain and administer a database to store customer details provided to AEMO under this clause.
- b) Each *user* must update, format and deliver a new *complete customer listing* to AEMO by close of *business* on the tenth *business day* after the end of the calendar month.
[MIBB] T900 Customer and Site Details
- c) By the twelfth *business day* after the end of the calendar month AEMO must:
 - i. validate that:
 - A. all mandatory fields as defined in the *complete customer listing* are populated;
 - B. for each *MIRN*, the *current user* identified in the *complete customer listing* corresponds to the *current user* identified in the *AEMO registry* as at the 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 under clause 408(c)(i), notify the relevant *user* of the failure.
[MIBB] INT801 T900 Validation Results

409 Retailer of Last Resort Event

A *RoLR event* is defined under Part 6 of the National Energy Retail Law.

In a *RoLR event*, the execution of the clauses below will be carried out by a series of Oracle database scripts detailed in the operational procedure:

Handle SA RoLR Event.doc

The files generated and provided to participants and AEMO as specified in the clauses below are detailed in the document:

FRC B2B System Interface Definitions.

[MIRN] T980/INT603 List of *RoLR transfers*

[MIRN] T1060 List of *AEMO meter fixes*

410 Cancelled and Accelerated Customer Transfers

- a) Where a *RoLR event* has occurred, AEMO must, in relation to a *transfer request* that is lodged or *pending*:
 - i. where the *incoming user* is the *failed Retailer*, cancel all *transfer requests* and deliver a notice of the withdrawal of the *transfer request*, to the *current user*, the *incoming user* and the *network operator* for the *delivery point* to which the *transfer request* relates before 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 *current user* and the *transfer request* is not a *move in*, accelerate the *transfer request* and deliver a *transfer confirmation* to the *incoming user*, the *user* and the *network operator* for the *delivery point* to which the *transfer request* relates before the *RoLR gas day*;
 - iii. where the MIRN, that is subject to a *transfer request*, has the *failed Retailer* recorded as the *current user* and is a *move in* and;
 - A. if the *transfer day* is ten days or less from the *RoLR gas day*, AEMO must accelerate the *transfer request* and deliver a *transfer confirmation* to the *incoming user*, the *current user* and the *network operator* for the *delivery point* to which the *transfer request* relates before the *RoLR gas day*; [MIBB]T1070 *RoLR CATS Accelerated Transfers* or
 - B. if the *transfer day* is more than ten calendar 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 *AEMO registry* update process described in clause 411.

411 Metering Register Update

Before the *RoLR gas day*, for each *MIRN* for which the *failed Retailer* is recorded as the *current user* and to which clause 410 does not apply, AEMO must amend the *AEMO registry* by recording the *designated RoLR* as the *current user*.

412 MIRN Database and MSD Database Update

Notwithstanding clause 62, the *network operator* must:

- (a) for each *MIRN* for which the *failed Retailer* is recorded as the *current user* and to which clause 410 does not apply, the *network operator* must amend the *MIRN database* and the *MSD database* by recording the *designated RoLR* as the *current user*; and
- (b) provide AEMO with a report of the details of each *MIRN* that has been updated in the *MIRN database* and *MSD database*.

413 Data Exchange

Before the *RoLR gas day* AEMO must provide:

- (a) each *designated RoLR* a file containing customer details using the most recently received *complete customer listing* for the *MIRNs* for which they have become

- the *current user* in accordance with the *AEMO Specification Pack*; [MIBB] INT970 Customer and Site Details + BL & TS values and
- (b) the *network operator* a file containing details of the *MIRNs* where, in accordance with clause 411, AEMO has updated the *AEMO registry* with the *designated RoLR* as the *current user* and deliver that file in accordance with the *AEMO Specification Pack*.
- [MIBB] INT980 List of RoLR Transfers

414 Data Exchange from Failed Retailer

Before the *RoLR gas day*, the *failed Retailer* or its *insolvency official* must provide each *designated RoLR* a file containing customer details for the *MIRNs* for which they will become the *current user* in accordance with the *AEMO Specification Pack*.

415 Meter Reading and Account Creation

- (a) For each *MIRN* provided by AEMO under clause 413 and the *failed retailer* is not a *local area retailer*, the *network operator* must:
- i. calculate an *estimated value* for *RoLR gas day* and provide it to AEMO as an actual where the *MIRN* refers to a *basic meter*;
 - ii. calculate an *estimated value* for *RoLR gas day* and provide it to the *failed Retailer* where the *MIRN* refers to a *basic meter*;
 - iii. calculate the *energy value* for *RoLR gas day* and provide to AEMO as an actual where the *MIRN* refers to a *basic meter* ;
 - iv. calculate the *energy value* for *RoLR gas day* and provide to the *failed Retailer* where the *MIRN* refers to a *basic meter*;
 - v. provide the *designated RoLR* the data required under clause 103(3)(b);

and provide the information in accordance with the *AEMO Specification Pack* as soon as practicable but no later than 4 calendar days after the day in which the *RoLR gas day* ends.

- (b) For each *MIRN* provided by AEMO under clause 413 and the *failed retailer* is a *local area retailer*, the *network operator* must:
- i. calculate an *estimated value* for *RoLR gas day* and provide it to AEMO as an actual where the *MIRN* refers to a *basic meter*;
 - ii. calculate an *estimated value* for *RoLR gas day* and provide it to the *failed Retailer* where the *MIRN* refers to a *basic meter*;
 - iii. calculate the *energy value* for *RoLR gas day* and provide to AEMO as an actual where the *MIRN* refers to a *basic meter*;
 - iv. calculate the *energy value* for *RoLR gas day* and provide to the *failed Retailer* where the *MIRN* refers to a *basic meter*;
 - v. provide the *designated RoLR* the data required under clause 103(3)(b);
 - vi.

and provide the information in accordance with the *AEMO Specification Pack* as soon as practicable, but no later than 8 calendar days after the day on which the *RoLR gas day* ends.

416 Updates to Estimated Meter Reading

- (a) The *network operator* must provide any updates to estimated data provided under clause 415 to AEMO, the *failed Retailer* and *designated RoLR*.
- (b) The updates must be provided as soon as it is practical to do so, but in any event no later than the 425th *gas day* after the end of the month in which the *RoLR gas day* occurs.

417 Service Order Processes

- (a) Where a *network operator* has not yet completed service orders that were initiated prior to *RoLR gas day* by the *failed Retailer* who is not a *local area retailer*; the *network operator* in accordance with the *AEMO Specification Pack* must provide a *service order in flight report* to the *designated RoLR* by the next calendar day.
- (b) Where a *network operator* has not yet completed service orders that were initiated prior to *RoLR gas day* by the *failed Retailer* who is the *local area retailer*; the *network operator* in accordance with the *AEMO Specification Pack* must provide a *service order in flight report* to the *designated RoLR* as soon as practicable but no later than 4 calendar days after the *RoLR gas day*.

418 Industry reconciliation program

No [BS] requirement. Refer to [RMP] for context only.

Appendix 1 Coding of gas zones and gate points

Appendix 1.1 There is no Appendix 1.1

Appendix 1.2

Appendix 1.2.1. Coding of gas zones

To minimise the number of data fields required in the AEMO Registry and the *network operators' databases* the concepts of licence area, *sub-network* and *heating value* zones are all coded using a single 5 character gas zone code, as follows:

{Note: The following code is split into two components:

- (a) AB – which is held in the existing two digit transmission zone and identifies the *network operator*, licence and *Access Arrangement* coverage; and
- (b) CCD – which is held in the existing three digit *heating value* zone and identifies the *sub-network* and *gas zone* within the *sub-network* .}

ABCCD, where:

A is used to indicate who is the *network operator*. **A** is an alpha numeric field that can range from 2 to Z:

2 = Envestra

B is used to segregate by licence area and *Access Arrangement* Coverage. **B** is a numerical field:

Envestra in SA: 1 = Envestra SA GDS

 2 = Envestra Mildura GDS

CC is a 2 character alphanumeric code used to identify the *sub-network* within a *GDS* and the code varies dependant on the **A** code:

Envestra in SA (ie where A = 2) CC equals as follows:

01 = Adelaide Metropolitan

02 = Waterloo Corner

03 = Virginia

04 = Wasleys

05 = Freeling

06 = Nuriootpa

07 = Angaston

08 = Murray Bridge

09 = Berri

10 = Mildura

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11 = Peterborough

12 = Port Pirie

13 = Whyalla

14 = Mount Gambier

Farm tap sub-networks:

50 = Daveyston

51 = Burra

52 = Nangwarry

53 = Snuggery

54 = Whyalla A

55 = Whyalla B

56 = Whyalla C

57 = Smithfield

58 = Penola

59 = Port Bonython

60 = Angaston A

D is used to identify a *heating value zone* within a *sub-network*:

For Envestra SA, D =

1 = Moomba to Adelaide Pipeline (MAP) or Riverland

2 = MAP + SEAGAS

3 = Katnook

Examples:

The Adelaide Metro sub network in Envestra's Adelaide GDS supplied by MAP	21011
The Adelaide Metro sub network in Envestra's Adelaide GDS supplied by a combined gas from MAP and SEAGAS	21012
The Port Bonython Farmtap in Envestra's SA Country GDS supplied by MAP	21591
The Smithfield Farmtap in Envestra's Adelaide GDS supplied by MAP	21571
The Mount Gambier sub network in Envestra's South East GDS	21143

Appendix 1.2.2. Coding of gate points

A *gate point* for a *sub-network* means a point (which may be the same location as a physical gate point), which is designated as the *gate point* under clause 15 for the *sub-network* from a *pipeline* and it is the sum of all “*physical gate points*” from that *pipeline* on a *sub-network*.

Examples:

In South Australia there are 4 gate stations (each with an associated *physical gate point*) supplying gas to the Adelaide Metropolitan *sub-network* in Envestra’s SA GDS, three from the MAP (Gepps Cross, Elizabeth and Taperoo) and one from the SEAGAS Pipeline at Cavan. As a result there are two *gate points* one that is the aggregate of the 3 MAP physical gate points and one equating to the SEAGAS *physical gate point*.

The same base coding is used to identify *gate points* at which gas is supplied into each *sub-network* from each *pipeline*. The coding used is as follows:

ABCCE, where:

A is used to indicate who is the *network operator*. **A** is an alpha numeric field that can range from 2 to Z, refer above for details.

B is used to segregate by licence area and *Access Arrangement Coverage*. **B** is a numerical field, refer above for details.

CC is a 2 character alphanumeric code used to identify the *sub-network* within a GDS and the code varies dependant on the A code, refer above for details.

E is used to indicate which *pipeline* the gate is connected to. **E** is an alpha field that can range from A to Z:

Envestra in SA: S = SEAGas Pipeline
 M = Moomba to Adelaide Pipeline
 K = Katnook Pipeline

Examples:

The gate point on the MAP that supplies the Adelaide Metro sub network in Envestra’s SA GDS	2101M
The gate point on the SEAGas Pipeline that supplies the Adelaide Metro sub network in Envestra’s SAGDS	2101S
The gate point on the Katnook Pipeline that supplies the Mount Gambier sub network in Envestra’s SA GDS	2114K
The gate point on the MAP that supplies the Mildura sub network in Envestra’s Mildura GDS	2210M

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Appendix 2 Estimation and Verification Methodology

Appendix 2.1 There is no sub-appendix 2.1

2.1.1 There is no clause 2.1.1.

2.1.2 There is no clause 2.1.2.

2.1.3 There is no clause 2.1.3.

2.1.4 There is no clause 2.1.4.

2.1.5 There is no clause 2.1.5.

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Sub-appendix 2.2 Verification Methodology

2.2.1 Verification Methodology for Basic Meters

A Network Operator must use the methodology for verification and substitution of metering data prescribed by the South Australian Metering Code issued by ESCOSA.

2.2.2 Verification Methodology for Interval Meters

A Network Operator must use the methodology for verification and substitution of metering data prescribed by the South Australian Metering Code issued by ESCOSA.

2.2.3 Estimation Methodology for Basic Meters

A Network Operator must use the methodology for estimation of metering data prescribed by the South Australian Metering Code issued by ESCOSA.

2.2.4 Estimation Methodology for Interval Meters

A *Network Operator* must use the methodology for estimation of *metering data* prescribed by the South Australian Metering Code issued by *ESCOSA*.

Sub-appendix 2.3 AEMO's Estimation Methodology for Gate Point Data, Net System Load and Interval Meters

Estimation of Data for Interval Meters

In relation to substitutions for a time interval of the 'Substitution Day' for net system load and interval meters, the *data estimation entity* is to use data from the same time interval of the first available 'Preferred Day' (as detailed in the table below) unless:

- The substitution day was a public holiday, in which case the most recent Sunday is to be used.
- The substitution day was not a public holiday but the 'Preferred Day' is a public holiday, in which case the substitution 'Preferred Day' to be used must be the most recent Preferred Day that is not a public holiday.

Substitution Day	Preferred Day (in order of availability)
Monday	Monday**
Tuesday	Tuesday** Wednesday** Thursday** Wednesday* Thursday*
Wednesday	Wednesday** Tuesday* Thursday** Thursday* Tuesday**
Thursday	Thursday** Wednesday* Tuesday* Wednesday** Tuesday**
Friday	Friday**
Saturday	Saturday**
Sunday	Sunday**

Note: * Occurring in the same week as the substitution day.

** Occurring in the week preceding that in which the substitution day occurs.

Examples: If we fail to get data for a site on Monday the 8th of January 2007. In accordance with the table we would first try Monday 1 January 2007, and as this is a public holiday, we next try Monday 25 December 2006, and as this is also a public holiday we finally end up using the data from Monday 18th December 2006 as estimate for Monday the 8th of January 2007.

Similarly if we need data for Friday the 2nd of May 2003, we first try Friday 25 April, ANZAC day, next try Friday 18 April, Good Friday, and finally use Friday 11th April.

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Estimation of Data for Gate Point Meters

In relation to substitutions for a time interval of the ‘Substitution Day’ for *gate point* meter data, the *data estimation entity* is to use the *nomination estimation methodology* as outlined below:

- In South Australia, summing the *pipeline profiled forecast* for the relevant *sub-network* and *pipeline* for the relevant *gas day*.

Appendix 3 Calculation of the MIRN checksum

Appendix 3.1 Calculating the MIRN checksum

Under this document, a one digit checksum is used to reduce the frequency of *MIRN* data entry errors which cause *transfer errors*.

A summary of the algorithm used to create the *MIRN checksum* is:

- (1) Double the ASCII value of alternate digits within the *MIRN* beginning with the right-most digit.
- (2) Add the individual digits comprising the products obtained in step 1 to each of the unaffected ASCII value digits in the original number.
- (3) Find the next highest multiple of 10.
- (4) The check digit is the value obtained in step 2 subtracted from the value obtained in step 3.

If the result of this subtraction is 10 then the check digit is 0.

Section 2.3 provides a worked example of the algorithm. Section 2.4 provides samples.

The *MIRN checksum* is always a numeric character.

The checksum is required for applications where data entry occurs and there is a risk of character transposition, for example from paper to electronic systems or through an interactive telephone service.

2.3 Worked example

The logic of the algorithm can be summarised as:

- (1) Individually process each alphanumeric character in the *MIRN*, starting with the right most.
- (2) For each character:
 - (i) convert the character to its ASCII value; and
 - (ii) for the right most character and each alternate character reading left, double the ASCII value obtained in step (b)(ii), above; and
 - (iii) calculate the sum of the individual digits of the ASCII value to a register holding the total added value for the *MIRN checksum*.
- (3) Subtract the total added value register from the next highest multiple of 10.

If the result is 10, the checksum is 0, otherwise the result is the checksum.

The *MIRN* for the example is **5600012357**

- (1) Step 1. Initialise variables used by the process.
- (a) **Double_This_Char** is a Boolean that indicates whether the character currently being processed should be doubled.
 - (b) **Char** is the character currently being processed, as it appears in the MIRN.
 - (c) **ASCII_Char** is the ASCII value of **Char**.
 - (d) **Total** is the running sum of the digits generated by the algorithm.
 - (e) **Checksum** is the final result.
- At the start of the process:

- **Double_This_Char = True** because the right most character, and then every alternate character, is doubled by the algorithm.
- **Total = 0**
- **Checksum = NULL**

- (2) Step 2: Read the MIRN character by character, starting with the right most character.

eg. Char = 7

- (3) Step 3: Convert the character to its ASCII value.

eg. ASCII_Char = 55

- (4) Step 4. Double the ASCII value if the character is the right most of the MIRN or an alternate.

eg. ASCII_Char = 110

Double_This_Char = Not Double_This_Char

- (5) Step 5: Add the individual digits of the ASCII value to the Total.

eg. Total = Total + 1 + 1 + 0 (i.e. Total = 2)

Performing steps 2 through 5 for each character in our example *MIRN* gives the following results:

Character	Total Before	ASCII Value	Double?	Doubled Value	Total After
7	0	55	Y	110	2 (1+1+0)
5	2	53	N	53	10 (2+5+3)
3	10	51	Y	102	13 (10+1+0+2)
2	13	50	N	50	18 (13+5+0)

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Character	Total Before	ASCII Value	Double?	Doubled Value	Total After
1	18	49	Y	98	35 (18+9+8)
0	35	48	N	48	47 (35+4+8)
0	47	48	Y	96	62 (47+9+6)
0	62	48	N	48	74 (62+4+8)
6	74	54	Y	108	78 (74+1+0+8)
5	83	53	N	53	91 (83+5+3)

The value of **Total** after processing the entire *MIRN* is 91.

The next highest multiple of 10 is 100.

Therefore, the *MIRN checksum* = 100-91 = 9

2.4 Samples

The following checksums were calculated under clause 2.3. The *MIRN* and *MIRN checksums* are provided to assist participants in checking their implementation of the *MIRN checksum* algorithm.

MIRN	MIRN checksum	MIRN	MIRN checksum
5500000278	4	5600000278	2
5500003074	5	5600003074	3
5500008129	2	5600008129	0
5500012357	8	5600012357	9
5500023478	0	5600023478	8
5500047359	4	5600047359	2
5500067253	5	5600067253	3
5500079467	6	5600079467	4
5500089000	8	5600089000	6
5500099352	6	5600099352	4
5500102781	5	5600102781	3
5500139654	8	5600139654	6
5500200000	4	5600200000	2
5500289367	3	5600289367	1
5500346583	7	5600346583	5

Appendix 4 Auditor's deed of undertaking

[No BS requirement. Refer to RMR for context only.]

Appendix 5 Calculations, Rounding and Units

Appendix 5.1 Rounding

Where a *participant*, *pipeline operator* or *prescribed persons* is required to calculate a value under these Procedures, the calculation must not truncate any value.

A derived value has accuracy equal to the accuracy of the least accurate input variable to the calculation.

For example:

For a value derived from the product of two variables, one accurate to two decimal places and one accurate to three decimal places, 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. If the last digit is a 5, the value is rounded up.

For example:

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	1.485	to two decimal places	equals 1.49

Appendix 5.2 Calculations

In all cases:

$$TE = PCF \times HV \times V$$

where:

TE = total energy;

PCF = *pressure correction factor*; and

V = volume.

Example 1 Total Energy Calculation:

PCF of 1.0989

HV of 39.81

Volume of 200

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$$\begin{aligned}\text{Total energy} &= 1.0989 * 39.81 * 200 \\ &= 8749.4418\end{aligned}$$

Rounded to 8749

Example 2 Total Energy Calculation:

PCF of 1.0989

HV of 41.89

Volume of 200

$$\begin{aligned}\text{Total energy} &= 1.0989 * 41.89 * 200 \\ &= 9206.5842\end{aligned}$$

Rounded to 9207

Example 3 Total Energy Calculation:

PCF of 1.0989

HV of 38.55

Volume 345 hundred cubic feet

$$\begin{aligned}\text{Total energy} &= 1.0989 * 38.55 * (345 * 2.832) \\ &= 41389.94982\end{aligned}$$

Rounded to 41390

2.4.1 Units

The total energy calculated by network operators will be expressed in megajoules for all meters.

Appendix 6 There is no Appendix 6

Appendix 7 There is no Appendix 7

Appendix 8 There is no Appendix 8

Appendix 9 Fallback User-Shipper Agreement

[No BS requirement. Refer to RMR for context only.]

Appendix 10 There is no Appendix 10

Appendix 11 Heating degree day for South Australia

Appendix 11.1 – HDD zones

(2) South Australia contains the following *HDD zones*:

- (a) *Northern HDD zone* – for which the weather data for Ceduna must be used;
- (b) *Adelaide HDD zone* – for which the weather data for Adelaide (Kent Town weather station) must be used;
- Riverland HDD zone* – for which the weather data for Mildura must be used; and
- Mount Gambier HDD zone* – for which the weather data for Mount Gambier must be used.

(3) For the purposes of clause 177, South Australia contains the following negative HDD zones:

- (1) *Adelaide Metropolitan HDD zone* - for which the weather data for Adelaide (Kent Town weather station) must be used.
- (4)
- (5) A basic-metered delivery point:
 - (1) is in the *Northern HDD zone* if the *basic-metered delivery point* is located in one of the following *gas zones*:
 - 11 – Peterborough
 - 12 – Port Pirie
 - 13 – Whyalla
 - 54 – Whyalla A
 - 55 – Whyalla B

56 – Whyalla C

59 – Port Bonython

- (2) is in the *Adelaide HDD zone* if the *basic-metered delivery point* is located in one of the following *gas zones*:

01 – Adelaide Metropolitan

02 – Waterloo Corner

03 – Virginia

04 – Wasleys

05 – Freeling

06 – Nurioopta

07 – Angaston

08 – Murray Bridge

50 – Daveyston

51 – Burra

57 – Smithfield

60 – Angaston A

- (3) is in the *Riverland HDD zone* if the *basic-metered delivery point* is located in one of the following *gas zones*:

09 – Berri

10 – Mildura

- (4) is in the *Mount Gambier HDD zone* if the *basic-metered delivery point* is located in one of the following *gas zones*:

14 – Mount Gambier

52 – Nangwarry

53 – Snuggery

58 – Penola.

- (5) is in the *Adelaide Metropolitan HDD zone* if the *basic-metered delivery point* is located in one of the following *gas zones*:

01 – Adelaide Metropolitan

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Appendix 11.2 – Coefficients for heating degree day calculations

AEMO must use the value set out below for each coefficient in its calculations:

- (a) $C_1 = 0.62$;
- (b) $C_2 = 0.2$;
- (c) $C_3 = 0.18$;
- (d) $C_4 = 1$;
- (e) $C_5 = 0.44$;
- (f) $C_6 = -0.385$;
- (g) $C_7 = 0.38$; and
- (h) $C_8 = 0.11$.

Appendix 12 There is no Appendix 12