

OVERVIEW GUIDE TO THE WESTERN AUSTRALIAN GAS RETAIL MARKET

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Purpose

AEMO has prepared this document to provide information about the broad concepts and workings of the gas retail market operated by AEMO in Western Australia.

Disclaimer

This document is intended as a guide only. The information in it may be subsequently updated or amended. This document does not constitute legal or business advice, and should not be relied on as a substitute for obtaining detailed advice about the regulatory instruments governing the WA retail gas market, including (without limitation), the:

- Energy Coordination Act 1994 (WA)
- Retail Market Procedures (WA)
- WA Retail Gas Market Agreement

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VERSION RELEASE HISTORY

Version	Effective Date	Summary of Changes
1.0	31 October 2016	First Issue
2.0	30 April 2018	Updated per change IN002/17W which involved changes to the Procedure Change Committee (PCC) terms of reference and chapter 9 of the procedures.



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1. INTRODUCTION

This guide provides a high-level overview of the Western Australian ("WA") gas retail market and complements the Australian Energy Market Operator's ("AEMO") "Technical Guide to the Western Australian Gas Retail Market." This guide is intended to help gas retail market participants, customers, and other stakeholders understand the broad concepts and workings of the market.

2. WHAT IS THE GAS RETAIL MARKET?

The WA gas retail market serves over 740,000 gas customers (as at August 2016). The purpose of the gas retail market is to give all gas customers the ability to buy natural gas from the User (i.e. Retailer) of their choice. In exercising this choice, customers need to be able to transfer from one User to another.

Users and customers need the customer transfer process to be managed efficiently and effectively to ensure that transfers take place smoothly, and all gas usage is correctly billed and accounted for.

The gas retail market also provides a mechanism by which Users are able to settle gas supply and transmission contracts (see section 9.2).

3. GAS RETAIL MARKET REGULATORY FRAMEWORK

3.1. Development of the Gas Retail Market Arrangements

The WA Government commenced developing gas full retail contestability ("FRC") arrangements for WA in 2002, and subsequently joined forces with the South Australian ("SA") Government to develop gas FRC arrangements for both States. Once the two State Governments established the policy objectives for the gas markets and suitably defined the requirements of Retail Market Operators, they handed responsibility for developing the details of the market arrangements to the "Gas Market Participants" – the Users (i.e. Retailers) and Network Operators.

The Users and Network Operators in WA and SA established Retail Energy Market Operator Company Ltd ("REMCo") to be the Retail Market Operator in both States. REMCo was incorporated on 8 January 2003, and commenced operations in WA on 31 May 2004 and in SA on 28 July 2004.

However, REMCo subsequently transferred responsibility for administration of the SA gas retail market to AEMO on 1 October 2009, and of the WA gas retail market on 31 October 2016.

3.2. Governing Legislation and Regulatory Environment

The primary governing legislation for the WA gas retail market is the *Energy Coordination Act 1994*. The *Energy Coordination Act 1994* requires "Retail Market Schemes" to be established for the operation of the State-based gas retail market. All Retail Market Schemes must have:

- (a) an agreement between the "Gas Market Participants" that is between Users and Network Operators;
- (b) an independent entity to manage the Retail Market Scheme (the "Retail Market Operator"); and
- (c) a set of retail market rules that cover the requirements and processes for practical FRC.

The Energy Coordination Act 1994 also indicates that:

- the Gas Market Participants are to be bound by the agreement to comply with the terms of the retail market rules; and
- Pipeline Operators and Prescribed Persons (i.e. Self-Contracting Users, Shippers, and Swing Service Providers) do not need to be bound by the agreement, but are required to comply with the relevant parts of the retail market rules.

The Retail Market Operator must be independent of the commercial outcomes of the market, but may be owned by the Gas Market Participants. The *Energy Coordination Act 1994* requires the Retail Market Operator to recover its costs from the Gas Market Participants.

The Economic Regulation Authority ("ERA") is responsible for the economic regulation of the WA gas market, which includes oversight of the AEMO Retail Market Scheme.



3.3. The AEMO Retail Market Scheme

AEMO operates the only approved Retail Market Scheme in WA. The AEMO Retail Market Scheme covers the gas distribution systems operated by ATCO Gas Australia Pty Ltd (i.e. the Mid-West/South-West, Kalgoorlie-Boulder and Albany systems), and has the following elements:

- The "WA Gas Retail Market Agreement" is the agreement between AEMO and Gas Market Participants;
- AEMO is the Retail Market Operator; and
- The Retail Market Procedures (WA) (the "Procedures") are the retail market rules that govern the requirements and process for practical gas FRC.

The Procedures require all market participants to comply with the AEMO Specification Pack and the FRC Hub Operational Terms and Conditions, and these documents are also part of the AEMO Retail Market Scheme.

Users and Network Operators must sign the WA Gas Retail Market Agreement to participate in the WA gas retail market, and must comply with the Procedures.

Pipeline Operators and Prescribed Persons have obligations under the Procedures, and are required to comply with the Procedures through either legislation or regulations. Pipeline Operators and Prescribed Persons are not required to sign the WA Gas Retail Market Agreement, but Self-Contracting Users may sign the agreement if they wish to do so.

AEMO Membership is open to all signatories to the WA Gas Retail Market Agreement, but AEMO membership is not required to participate in the WA gas retail market agreement. A list of the WA gas retail market participants is available on the AEMO website (www.aemo.com.au).

3.4. AEMO Structure

AEMO operates gas and electricity retail and wholesale markets in Australia. AEMO is a not-for-profit company that operates in accordance with the terms of its Constitution. The AEMO Constitution sets out, amongst other things, AEMO's objects, and the membership and workings of the AEMO Board, and is available on the AEMO website (www.aemo.com.au).

AEMO is owned 60% by Government and 40% by industry; and membership is open to any party that meets the eligibility criteria for "Government Members" and "Industry Members", as set out in clause 1.1 of the AEMO Constitution.

AEMO is governed by a Board of five to ten directors, all of whom are appointed by the COAG Energy Council (except the Managing Director who is appointed by the Board), and must include:

- · the Chair,
- · the Managing Director, and
- three to six directors with industry experience.

AEMO has roles in a wide range of significant energy markets across Australia, including as the:

- operator of the National Electricity Market and power system, which covers wholesale trading and retail market operation in Queensland, New South Wales, the Australian Capital Territory, Victoria, SA and Tasmania;
- operator of the Wholesale Electricity Market in WA;
- operator of the Declared Wholesale Gas Market and system in Victoria;
- operator of the gas Short Term Trading Markets in Sydney, Brisbane and Adelaide;
- operator of the Gas Supply Hubs at Wallumbilla (Queensland) and Moomba (SA);
- operator of the gas retail markets in Queensland, New South Wales and the Australian Capital Territory, Victoria, SA and WA;
- operator of the Gas Bulletin Board for Queensland, New South Wales, Victoria, SA and Tasmania, and the separate Gas Bulletin Board for WA;
- National Transmission Planner for the National Electricity Market; and



 developer of the Gas Statement of Opportunities for Queensland, New South Wales, Victoria, SA and Tasmania, and the separate Gas Statement of Opportunities for WA.

3.5. Cost Recovery and Fees

The AEMO Board sets WA gas retail market fees annually using the approach defined in Chapter 8 of the Procedures. AEMO operates on a cost-recovery basis only (no profit). AEMO generates revenue from the WA Gas Market Participants to cover the capital and operating costs associated with administration of the Procedures in four forms:

Registration Fee A one-off charge (\$) on all Gas Market Participants, payable upon executing

the WA Gas Retail Market Agreement.

Service Fee An annual charge (\$) levied on all Gas Market Participants. This fee is set so

as to not create a material barrier to entry for new participants, but sufficient to

ensure that Gas Market Participants are serious about operation in WA.

Market Share Charge

A monthly fee levied on Users based on their market share

(\$/customer/month). This fee recovers the majority of AEMO's costs for the

WA gas retail market.

Additional Service

Charge

AEMO may provide additional services to Market Participants, and may charge them an Additional Service Charge to recover the costs of providing such services, where the payment of the Additional Service Charge has been

agreed by the Market Participant.

Clause 362 of the Procedures provides for AEMO to approve lower Registration and Service Fees for small Users and Self-Contracting Users. This is to prevent fees from being a barrier to entry for the WA gas retail market for smaller market participants.

The AEMO Board-approved fees are published annually on the AEMO website (www.aemo.com.au).

Any surplus revenue from WA gas retail market operations is returned to Users in WA as a reduction in future years' Market Share Charges.

To assist Users in managing their cash flows, AEMO attempts to maintain a stable fee base through each year. However, AEMO is entitled to adjust its fees to match actual costs incurred.

4. WHERE DO THE GAS RETAIL MARKET ARRANGEMENTS APPLY?

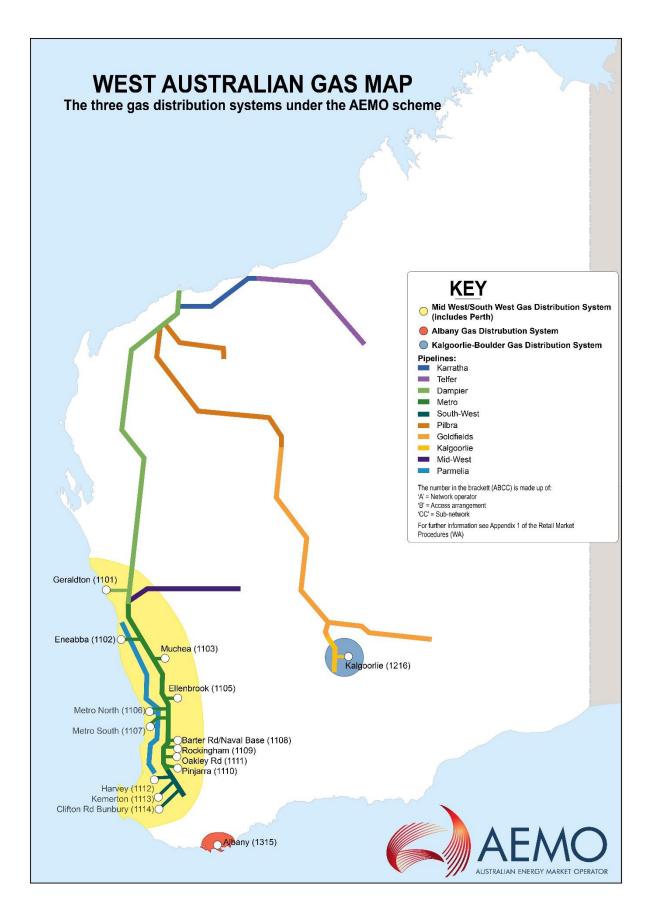
The *Energy Coordination Act 1994* requires all gas networks in WA to have a Retail Market Scheme, unless the network has only one Network Operator and one User (i.e. Retailer). Section 5.4 provides more information on the networks covered by the AEMO Retail Market Scheme.

There are a number of other smaller gas networks in WA, but the AEMO Retail Market Scheme does not apply to these systems, as they have only one Network Operator and one User.

The map on page 8 is the gas distribution systems that are covered by the AEMO Retail Market Scheme, including the:

- Mid-West/South-West Distribution System (stretching from Geraldton for Busselton, including the Perth metropolitan area)
- Kalgoorlie-Boulder Distribution System
- Albany Distribution System.







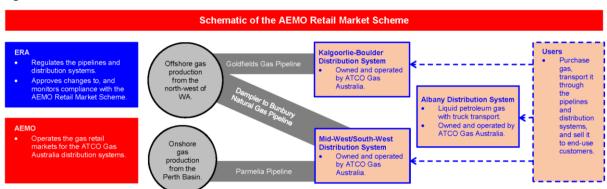
5. WHO ARE THE GAS RETAIL MARKET PARTICIPANTS?

5.1. Overview

The WA gas retail market primarily involves the following participants:

- AEMO, as the Retail Market Operator
- Pipeline Operators
- Network Operators
- Users
- Customers
- The ERA, as the regulator of the market.¹

Figure 1 Schematic of the AEMO Retail Market Scheme



5.2. **AEMO**

AEMO is the Retail Market Operator² for the following WA gas distribution networks:

- Mid-West/South-West Distribution System (including the Perth metropolitan area)
- Kalgoorlie-Boulder Distribution System
- · Albany Distribution System.

AEMO's role is to administer the business processes between the gas retail market participants to allow Users to cost effectively compete to supply gas to end-use customers. AEMO's four primary WA gas retail market business processes are:

- Delivery Point Management managing the transfer of responsibility for gas customers between Users.
- Balancing, Allocation and Reconciliation managing the daily allocation of gas usage to Users to enable settlement of gas supply and transmission contracts.
- Procedure Changes managing further development and improvement of the Procedures.
- Compliance providing administrative support to the Compliance Panel.

5.3. Pipeline Operators

Pipeline Operators own and operate the high pressure transmission pipelines that transport gas from the producers to the distribution networks. The following table lists the Pipeline Operators that transport gas to the markets served by AEMO.

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As of the date of publication of this Guide, the ERA is the regulator of the WA gas pipelines and gas distribution systems. However, the WA Parliament is considering legislation that will transfer responsibility for regulating these pipelines and gas distribution systems to the Australian Energy Regulator.

² AEMO also has a number of other energy market functions across Australia (see section 3.4). Contact information is available on the AEMO website (www.aemo.com.au).



Operator	Pipeline	Function		
DBP Transmission	Dampier to Bunbury Natural Gas Pipeline ("DBNGP")	Operates the DBNGP as a pressure controlled pipeline to transport gas from the North West Shelf to the Mid-West/South-West Distribution System.		
APA Group	Parmelia Pipeline	Operates the Parmelia Pipeline as a flow controlled pipeline to transport gas from the Perth basin to the Mid-West/South-West Distribution System.		
	Goldfields Gas Pipeline	Transports gas from the North West Shelf to the Kalgoorlie/Boulder Distribution System		

Pipeline Operators are not required to execute the WA Gas Retail Market Agreement, but have obligations under the Procedures, and are required to comply with these obligations by the *Energy Coordination Act 1994*.

5.4. Network Operator

Network Operators own and operate the lower pressure distribution systems that transport gas from transmission pipelines to end-use customers within their network.³

Network Operators are responsible for installing and reading meters, provision of energy data to AEMO and Users, and confirming meter identification and address information for the customer transfer purposes.

ATCO Gas Australia² is the Network Operator of all of the gas distribution networks currently covered by the AEMO Retail Market Scheme, including the:

- Mid-West/South-West Distribution System (including the Perth metropolitan area)
- Kalgoorlie-Boulder Distribution System
- Albany Distribution System.

5.5. Users (Retailers)

A User is an entity that has a haulage contract for the transport of gas through a sub-network. A User procures gas from gas producers, arrange for the gas to be transported through the transmission pipelines and distribution networks, and sell it to end-use customers.² Users are responsible for the customer relationship, including customer billing and transfers.

Users must obtain a gas trading license from the ERA if they want to sell gas to "small use customers" (those that consume 1 terajoule of gas per year or less), but do not require a license to sell gas to large customers.

5.6. Customers

Most gas customers are connected to gas distribution networks and may purchase gas from their retailer (User) of choice.

Large gas customers may choose to participate directly in the gas retail market – these customers are called "Self-Contracting Users" and must register with AEMO to participate in the market. Self-Contracting Users are responsible for sourcing their gas from producers, and making commercial arrangements for transport of the gas through the transmission pipelines and distribution networks to their premises; and have several responsibilities under the Procedures (contact AEMO for further information on Self-Contracting Users and for details on their responsibilities).

5.7. Economic Regulation Authority

The ERA is WA's independent economic regulator for the gas, electricity, and rail industries.⁴ The ERA's responsibilities with respect to the WA gas retail market and the AEMO Retail Market Scheme include:

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³ The specific sub-networks covered by the AEMO Retail Market Scheme are listed in Appendix 1 of the Procedures.

Further information on the ERA can be obtained from its website (www.erawa.com.au).



- Issuing and enforcing gas trading licenses;
- · Approving amendments to the Procedures;
- Enforcing compliance with the Procedures by Pipeline Operators and Prescribed Persons; and
- Reviewing the performance of the AEMO Retail Market Scheme.

6. GAS RETAIL MARKET OPERATION

6.1. Overview

The gas retail market is operated according to a set of processes, responsibilities and obligations specified in the AEMO Retail Market Scheme documentation, which are:

- The WA Gas Retail Market Agreement;
- The Gas Retail Market Procedures (WA) (the "Procedures");
- The AEMO Specification Pack; and
- The FRC Hub Operational Terms and Conditions.

Further information on the Retail Market Scheme documentation is provided in section 6.2 to 6.5.

AEMO also publishes a number of other related documents, including:

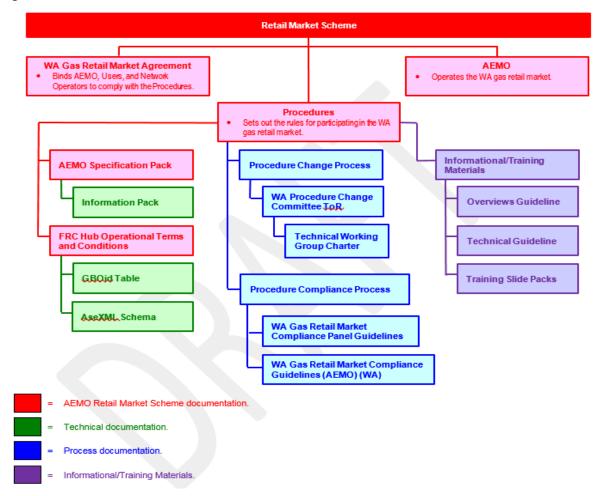
- Technical documentation these documents support the Retail Market Scheme documentation, and are designed to help gas retail market participants interpret the content of the AEMO Specification Pack and the FRC Hub Operational Terms and Conditions;
- Process documentation these documents provide the practical details for the Procedure change and Procedure compliance processes (see sections 7 and 8 for more information); and
- Informational/Training Materials these documents are to help market participants with their understanding of the market (see section 10 for more information).

AEMO requires approval from the ERA before implementing changes to the AEMO Retail Market Scheme documentation, but can amend the other documents without approval from the ERA. All of the AEMO Retail Market Scheme and related documentation is available on the AEMO website at www.aemo.com.au

The following diagram provides a schematic of the AEMO Retail Market Scheme and related documentation.



Figure 2 AEMO Retail Market Scheme



6.2. The WA Gas Retail Market Agreement

The WA Gas Retail Market Agreement is the agreement required under section 11ZOF(a) of the *Energy Coordination Act 1994* for the AEMO Retail Market Scheme.

AEMO has executed the WA Gas Retail Market Agreement; and all Scheme Participants (i.e. Users and Network Operators) must also execute the WA Gas Retail Market Agreement if they wish to participate in the WA gas retail market.

Parties that execute the WA Gas Retail Market Agreement will be eligible for AEMO membership, but are not required to be AEMO members to participate in the WA gas retail market.

Other market participants – Pipeline Operators and Prescribed Persons – are required by the *Energy Coordination Act 1994* to comply with the Procedures, but are not required to execute the WA Gas Retail Market Agreement. Self-Contracting Users may execute the WA Gas Retail Market Agreement if they wish (and may then elect to become an AEMO Member), but are not required to do so.



The following table lists the obligations imposed by the WA Gas Retail Market Agreement.

Party	Obligations
AEMO	 Is bound by and operate the WA gas retail market in accordance with the Procedures. Has the primary aim to develop and operate cost efficient and effective retail market arrangements, which are fair and equitable, to facilitate competition in the WA gas retail market. Must act in a manner that treats all Scheme Participants fairly and equitably, and does not unfairly discriminate between the interests of Scheme Participants.
Scheme Participants	 Are bound by and must observe the terms of the Procedures, including any changes to the Procedure from time-to-time. Must abide by any determination made by the Compliance Panel established under the Procedures.

6.3. The Retail Market Procedures (WA)

The Procedures provide an efficient means of managing the gas retail market by regulating the activities of parties involved in the market. The following table provides a summary of the content of the Procedures.

Chapter	Content		
Interpretation and administration of the Procedures	Deals with legal clarity, including: • defining terms used in the Procedures; and • identifying who the Procedures apply to.		
2. The databases	Deals with management of databases, including: the "AEMO registry", which is maintained by AEMO, and links Users with their customers; and the "MIRN database", which is maintained by the Network Operator, and contains the meter information for all customers.		
3. MIRN transactions	Deals with the transfer of customers between Users (see section 9.1).		
4. Metering	Sets out the requirements for metering equipment, meter reading, and management of metering data.		
5. Allocation, reconciliation and swing	Sets out the processes for managing the daily allocation of gas usage to Users to enable settlement of gas supply and transmission contracts. ⁵		
6. Compliance and interpretation	Deals with breaches and interpretation of the Procedures, and with establishment of the Compliance Panel (see section 8).		
7. Reporting and audits	Details the requirements for AEMO, Users, and Network Operators to audit and report on their compliance with the Procedures.		
8. Administration	Sets out administrative processes, including setting AEMO's fees.		
9. Procedure change process	Sets out the process to amend the Procedures. (see section 7).		
10. General provisions	Deals with the interaction between the Procedures, laws, and the relevant Access Arrangements.		

6.4. The AEMO Specification Pack

The AEMO Specification Pack provides the technical specifications for how the IT systems for AEMO and the gas retail market participants are to implement the Procedures. The AEMO Specification Pack is made up of agreed technical standards and business processes that enable Users, Network Operators, Pipeline Operators, and AEMO to transfer information between each others' systems. The AEMO Specification Pack documents are listed in the Appendix to this Guide, and are available on the AEMO website (www.aemo.com.au).

6.5. The FRC Hub Operational Terms and Conditions

The FRC Hub is a communication infrastructure operated by AEMO. The FRC Hub provides a gateway through which gas retail market participants can deliver and receive structured business-to-business ("B2B") and business-to-market ("B2M") messages utilising defined protocols and formats. The FRC

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Chapter 5 of the Procedures is the most complex part of market operations, and therefore represents the most risks to gas retail market participants (particularly Users). Gas retail market participants are urged to ensure that they have a detailed understanding of this portion of the market (see section 10 for more information on Chapter 5 of the Procedures.



Hub Operational Terms and Conditions set out the terms on which AEMO and market participants may use the FRC Hub. This document is available on the AEMO website (www.aemo.com.au).

7. AMENDING THE AEMO RETAIL MARKET SCHEME

The AEMO Retail Market Scheme needs to evolve over time as the WA gas retail market develops, and so Chapter 9 of the Procedures contains a defined "Procedure change process".

The Procedure change process is a consultative and inclusive process designed to ensure that:

- any issues with the market are explored and addressed; and
- any changes to the AEMO Retail Market Scheme (the Procedures, AEMO Specification Pack, or FRC Hub Operational Terms and Conditions) or other market documentation are developed and implemented in a controlled fashion.

AEMO runs the Procedure change process and consults the Procedure Change Committee ("PCC") on any proposed changes. The Procedure change process is summarised as follows:

- AEMO or any gas retail market participant can raise issues with the gas retail market and/or propose a change to the AEMO Retail Market Scheme.
- Market issues and proposed changes to the AEMO Retail Market Scheme are explored and developed by AEMO and the PCC.
- AEMO conducts a formal Procedure change process, in consultation with the PCC, as required by Chapter 9 of the Procedures.
- AEMO makes a determination on whether to proceed with a change to the AEMO Retail Market Scheme, and submits the proposed change to the ERA for approval.
 - AEMO must publish its application to the ERA, and market participants will be able to make submissions to the ERA.
- AEMO can only implement a change to the AEMO Retail Market Scheme after the change has been approved by the ERA and the approval has been published in the *Government Gazette*.

The following table provides further information on how the PCC and Technical Working Group (TWG) function.

Committee	Functions	
PCC	The Procedure Change Committee (PCC) is open to all interested organisations and stakeholders. Its role is to assist AEMO in making determinations on the matters under its consideration. It is also a forum for stakeholders to raise and address issues relating to the operation or functionality of the WA gas retail market. The PCC functions and administrative processes are described in the "WA Procedure Change Committee Terms of Reference".	
TWG	The Technical Working Group (TWG) functions and administration processes are described in the TWG charter. The TWG has a close working relationship with AEMO's technical working group, called the Information Technology Development Forum ("ITDF"). The TWG and ITDF jointly convene their meetings, which are normally held monthly.	

The WA Procedure Change Committee Terms of Reference and Technical Working Group Charter are all available on the AEMO website (www.aemo.com.au).

AEMO must undertake a different process to change the WA Gas Retail Market Agreement, including getting agreement from all signatories to the agreement and from the ERA.

8. COMPLIANCE WITH THE RETAIL MARKET PROCEDURES

The WA Gas Retail Market Agreement requires the Market Operator (AEMO) and all gas retail market participants to comply with the Procedures. Pipeline operators and prescribed persons are also required to comply with relevant provisions of the Procedures under the *Energy Coordination Act 1994*. The compliance process is defined in Chapter 6 of the Procedures, and works as follows:

• AEMO has established an independent Compliance Panel that has authority to make determinations on apparent Procedure breaches by AEMO or gas retail market participants.



- The Compliance Panel has the power to delegate decision-making authority to AEMO on whether any apparent Procedure breach by AEMO or a gas retail market participant is material.⁶
- Gas retail market participants, pipeline operators and prescribed persons may report to AEMO any alleged breaches of the Procedures that they become aware of.
- AEMO will investigate any compliance matters it becomes aware of, and will publish a "Notice of Apparent Procedure Breach" to notify all gas retail market participants and to ask whether they have been materially impacted by the apparent breach.
- Affected participants may be able to negotiate a commercial resolution of the matter, in which case they should promptly notify AEMO, and AEMO will account for this in making its determination on materiality.
- AEMO will then determine how to proceed as outlined in the following table.

Table 1 AEMO Compliance Process Decision Making

				Apparent Procedure Breach by	
				AEMO, Users, and Network Operators	Pipeline Operators and Prescribed Persons
Does AEMO have authority to	No			Refer the matter to the Compliance Panel.	Refer the matter to the ERA.
determine materiality?	Yes	Is the breach material?	Yes	Refer the matter to the Compliance Panel.	Refer the matter to the ERA.
			No	 Dismiss the matter; or Refer the matter to the Compliance Panel. 	Dismiss the matter; orRefer the matter to the ERA.

- The independent Compliance Panel will make determinations on:
 - any matters referred to it by the Board under step (5); and
 - any appeals of decisions made by the Board under step (5).

Details of how AEMO and the independent Compliance Panel will process compliance matters are provided in:

- the WA Gas Retail Market Compliance Guidelines (AEMO).
- The WA Gas Retail Market Compliance Panel Guidelines.

Both of the compliance guidelines are available on the AEMO website (www.aemo.com.au).

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The criteria for determining the materiality of an apparent Procedures breach are specified in the Procedures and are explained in the WA Gas Retail Market Compliance Guidelines (AEMO).



9. RETAIL MARKET KEY CONCEPTS

Two key concepts of note under the AEMO Retail Market Scheme are:

- · customer transfers; and
- balancing, allocation and reconciliation of gas on the network.

9.1. Customer Transfers

Customer transfers from one User (i.e. Retailer) to another are facilitated through an automated electronic business-to-business ("B2B") infrastructure based around a central message handling facility known as the "FRC Hub" and using standardised business processes.

9.1.1. Customer Consent

The customer transfer process is governed by the Procedures and can be initiated by a User on receipt of a customer request. The User can only lodge a customer transfer request if it has received "Explicit Informed Consent" from the prospective customer.

Explicit Informed Consent means that a prospective customer has authorised a User to obtain confidential meter and address information for that customer's meter from the relevant Network Operator; and to transfer that customer.

9.1.2. Meter Installation Registration Number (MIRN)

AEMO uses a national market numbering structure for gas delivery points. In the gas sector, these numbers are called Meter Installation Registration Numbers ("MIRNs") and the subset of MIRNs starting with "56" has been issued to the WA gas market.

MIRNs provide a unique identifier for each gas delivery point (i.e. to each gas meter) in WA. MIRNs are a reference against which other essential gas market data can be linked and managed, and are crucial to the accurate management of customer transfers. The Network Operator is responsible for assigning a MIRN to each delivery point.

9.1.3. Identifying a Customer Site

The MIRN is used in most gas retail market transactions. The User must know the MIRN when initiating a customer transfer request. If the User cannot obtain the MIRN directly from a prospective customer, then it can make a "MIRN discovery request" of the Network Operator by supplying the customer's address details.

9.2. Balancing, Allocation and Reconciliation Management

AEMO performs the balancing, allocation and reconciliation functions for the WA gas retail market; and calculates the gas injection and withdrawal quantities for each sub-network for each day. The balancing, allocation, and reconciliation functions are performed in accordance with Chapter 5 of the Procedures, and the calculations are made by AEMO's IT system – the Gas Retail Market System ("GRMS").

The balancing processes are designed so that the gas injection and withdrawal quantities across each sub-network for each day are always in balance (i.e. total injections equal total withdrawals).

Allocation quantities are calculated for each User based upon actual injection quantities from each pipeline and the nominated withdrawal quantities from each sub-network. AEMO then determines the user's estimated total withdrawals ("UETW") at each sub-network for each day, which is reconciled to account for data changes from the past 425 days.

The reconciliation process is a forward process (i.e. today's errors are fixed the day after tomorrow). Estimations used for today's allocations are fixed over the 28 days commencing the day after tomorrow.⁷

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Further information on balancing, allocation and reconciliation arrangements are described in the Swing Service slide packs on the AEMO website (www.aemo.com.au).



9.2.1. What is Swing Service?

Swing Service is part of the gas balancing, allocation and reconciliation process for the WA gas retail market. Swing Service occurs on sub-networks supplied by two pipelines – it currently applies on the North Metro and South Metro sub-networks in the Mid-West/South-West Distribution System.

The relevant pipelines are:

- The Parmelia Pipeline, which is the "Flow Controlled Pipeline" it delivers a set amount of gas over the gas day, within tolerances; and
- The DBNGP, which is the "Pressure Controlled Pipeline" it injects gas to maintain the subnetwork's pressure.

Swing Service is essentially the difference between:

- what is ordered by a User for its customers on one pipeline; and
- what is delivered to the User's customers from the other pipeline.

Swing Service is a park/loan service – it retroactively balances the mismatch between a User's arranged gas injections and its customers' withdrawals:

- · a positive Swing Service amount is a "loan"; and
- a negative Swing Service amount is a "park".

Swing Service requires both physical and financial settlement – Users must:

- take back/repay the park/loan volume in 2 days' time; and
- pay the Swing Service Provider that provided the park/loan a fee for having provided the park/loan.⁷

10. GAS RETAIL MARKET PARTICIPANT TRAINING

AEMO has developed a number of resources to aid the gas industry in participating in the market. These documents can all be accessed via the AEMO website (www.aemo.com.au). The following table lists the participant training resources and their purpose.

Document	Purpose		
Overview of AEMO and the Procedures	This slide pack provides a general overview of the AEMO arrangements and the content of the Procedures.		
The Basics of Swing Service	This slide pack provides a high-level overview of how Swing Service works as a practical guide for Users.		
The Details of Swing Service	This slide pack provides detailed information on how Chapter 5 of the Procedures works.		
Overview Guide to the Western Australian Gas Retail Market	 This document. Provides a high-level overview of the WA gas retail market, and complements AEMO's "Western Australian Gas Retail Market Technical Guide." Is intended to assist gas retail market participants, customers, and other stakeholders to understand the broad concepts and workings of the market. 		
Technical Guide to the Western Australian Gas Retail Market.	This guide provides a technical overview of the operational aspects of the WA gas retail market and is a supplement to the Overview Guide to the WA Gas Retail Market.		

AEMO will make WA gas retail market training sessions available to market participants and other interested parties upon request, at cost to session participants. Sessions are held annually, usually in May, or on request from interested parties.

AEMO has a model of the Swing Service mechanism that can be used in Swing Service sessions to show how Swing Service can be affected by various inputs. This model is not publicly available, but AEMO can arrange for it to be used as part of any related training sessions.



APPENDIX A. GAS RETAIL MARKET REFERENCE DOCUMENTS

The following is a list of reference documents relevant to the AEMO Retail Market Scheme that gas retail market participants should be familiar with. These documents can all be accessed via the AEMO website (www.aemo.com.au).

- The WA Gas Retail Market Agreement.
- The Retail Market Procedures (WA).
- The AEMO Specification Pack, which is comprised of the following documents:
 - AEMO Specification Pack Usage Guidelines
 - Interface Control Document
 - FRC B2B System Interface Definition
 - FRC B2M-B2B HUB System Specifications
 - FRC B2M-B2B Hub System Architecture
 - FRC CSV Data Format Specification
 - Connectivity Testing and Technical Certification
 - Readiness Criteria
 - B2B Service Order Specification Part 1
 - B2B Service Order Specification Part 2
 - The complete set of aseXML schemas and examples.
- The FRC Hub Operational Terms and Conditions.
- The GBOid Table.
- The Information Pack, which is comprised of the following documents:
 - Information Pack Usage Guidelines
 - SAWA Business Specification
 - FRC B2M Process Flow and Sequence Diagrams
 - FRC B2B Process Flow Diagrams
 - GRMS FTP User Guide
 - GRMS FTP Procedure Guide
 - GRMS FTP Registration Form
 - FRC Gas Hub Participant User Guide
 - Non-IT RMR communications
 - WA Profile Nominations Guideline
 - New Entrant GRMS Deliverables Information Sheet
 - Changing your Password on the Participant Server.
- Documents relating to the Retail Market Procedure (WA) change process, including:
 - The WA Procedure Change Committee Terms of Reference
 - The Technical Working Group Charter
 - Gas Market Issue Template (used to raise new issues for consideration by the PCC)
 - Proposed Procedure Change Template (used to formally propose Procedure changes)
 - Impact and Implementation Report Template (used to submit an Impact and Implementation Report to AEMO).
- Documents relating to the compliance process, including the:
 - WA Gas Retail Market Compliance Guidelines (AEMO)
 - WA Gas Retail Market Compliance Panel Guidelines



- Procedure Breach Interpretation Notice Template (used to submit a notice to AEMO to commence a formal compliance process)
- Pipeline Operator Informing of Special Circumstances Template (used to submit a notice to AEMO under clause 255 of the Procedures).
- Documents to assist with gas retail market participant training, including:
 - Three slide packs (available in presentation or handout format), including:
 - Overview of AEMO and the Procedures
 - o The Basics of Swing Service
 - o The Details of Swing Service.
 - Two Guides:
 - Overview Guide to the Western Australian Gas Retail Market (this document)
 - o Technical Guide to the Western Australian Gas Retail Market.