



# GUIDE TO VICTORIA'S DECLARED WHOLESALE GAS MARKET

FEBRUARY 2012

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# INTRODUCTION

Victorian businesses and households have relied on natural gas as a major source of energy since it was first rolled out in the state in the late 1960s.

Gas continues to play an essential role today. There are now more than two million Victorian natural gas customers and annual demand for natural gas (excluding that from gas-fired generators) exceeds 200 petajoules (PJ). Annual residential use of natural gas, driven by winter heating and hot water needs, exceeds 90 PJ – by far the highest in the country.

Growing needs have led to more sophisticated requirements. In particular, clearer supply and demand signals have been required to enable the sector to operate more efficiently, and in 1999 a wholesale gas market was introduced. This has enabled gas to be traded within Victoria.

Following the establishment of the wholesale market, the energy sector has continued to evolve, requiring a review of the operation of the market. This detailed study revealed the need for updates to be made and, in 2007, a new wholesale market commenced operation.

This guide explains the workings of the Declared Wholesale Gas Market – providing a high level overview for participants and others interested in gaining an understanding of its operation.

# WELCOME TO AEMO

**The Australian Energy Market Operator Ltd (AEMO) officially commenced operations on 1 July 2009, following extensive preparatory work over the past few years.**

AEMO's commencement created an integrated market operator to enhance the efficient operation and management of Australia's gas and electricity markets, and strengthen the national character of energy market governance.

AEMO incorporates the functions of the following former entities:

- (a) National Electricity Market Management Company (NEMMCO): operator of the wholesale electricity market and the national electricity grid;
- (b) The Victorian Energy Networks Corporation (VENCorp): operator of the Victorian wholesale and retail gas market, Queensland retail gas market and network planner for the Victorian electricity transmission system;
- (c) Gas Market Company (GMC): operator of the New South Wales retail gas market and gas continuity scheme;
- (d) Retail Energy Market Company (REMCO): operator of the South Australian retail gas market; and
- (e) Electricity Supply Industry Planning Council (ESIPC): provider of electricity system planning and advisory services in South Australia.

AEMO also has new responsibilities for infrastructure planning for both electricity and gas through its role as National Transmission Planner.

For the first time in Australia's history, AEMO delivers an array of gas and electricity services across jurisdictions and communities. It plays a crucial role in the direction and management of Australia's energy future – and the complexities arising from the nation's growing demand for energy.

Established by the Council of Australian Governments (COAG) and developed under the guidance of the Ministerial Council on Energy (now the Standing Council on Energy and Resources), AEMO is run by a skills-based board of nine Non-Executive Directors and the Managing Director and Chief Executive Officer.

The Board is chaired by Dr Thomas Parry, who was appointed to the role in July 2008. Mr Matt Zema was appointed as Managing Director and Chief Executive Officer in October 2008.

AEMO is a corporate entity limited by guarantee under the Corporations Act and operates on a cost recovery basis. Its membership is split between government and industry, on a respective 60 per cent and 40 per cent basis.

The inclusion of industry members strengthens the transparency of AEMO's operations and enhances its accountability to this stakeholder group. Government members include the Queensland, New South Wales, Victorian, South Australian and Tasmanian state governments, the Commonwealth and the Australian Capital Territory.

For further details on AEMO's governance, operations, structure and locations please visit our website, [www.aemo.com.au](http://www.aemo.com.au), or contact our Information Centre on 1300 236 600.

## SECTION 1

### THE DECLARED WHOLESALE GAS MARKET (DWGM)

**Each day an 'imbalance' will exist between the gas supplied by a Participant, and the gas consumed by that Participant and their customers. The Wholesale Market determines a market price used by all Participants to trade their imbalances.**

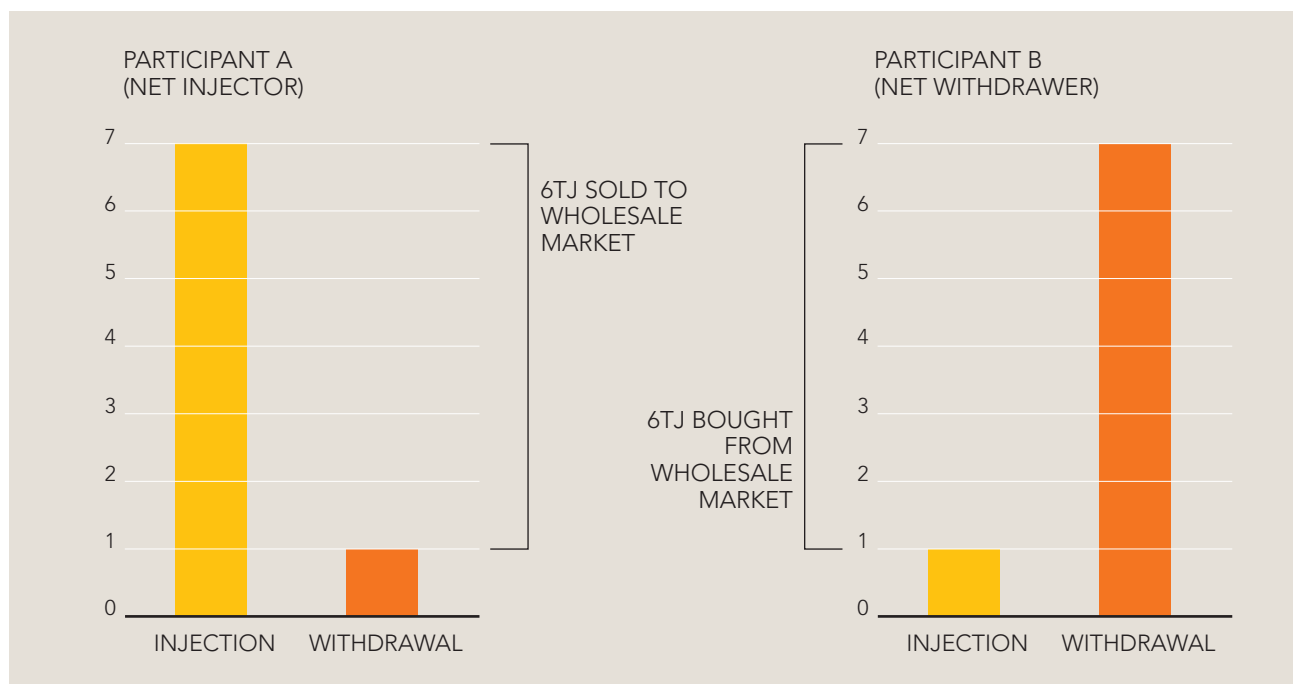
In the example in Figure 1, participant B is scheduled to withdraw 6TJ more than they are scheduled to inject. Participant B must therefore buy this shortfall of 6TJ from the Wholesale Market at the market price.

Participant A however is schedule to withdraw 6 TJ less than they are scheduled to inject. Participant A's excess supply is sold to the Wholesale Market at the market price.

In addition to providing a mechanism to trade imbalances, the Wholesale Market also provides the framework for many other essential functions, including:

- Gathering information for efficient pipeline operations;
- Maintaining a reliable and secure system for the transportation of gas;
- Management of metering data for operational and market balancing;
- Provision of a market based balancing service that determines price and gas flow quantities; and
- Management of market settlement and prudential risk.

FIGURE 1: DWGM TRADE



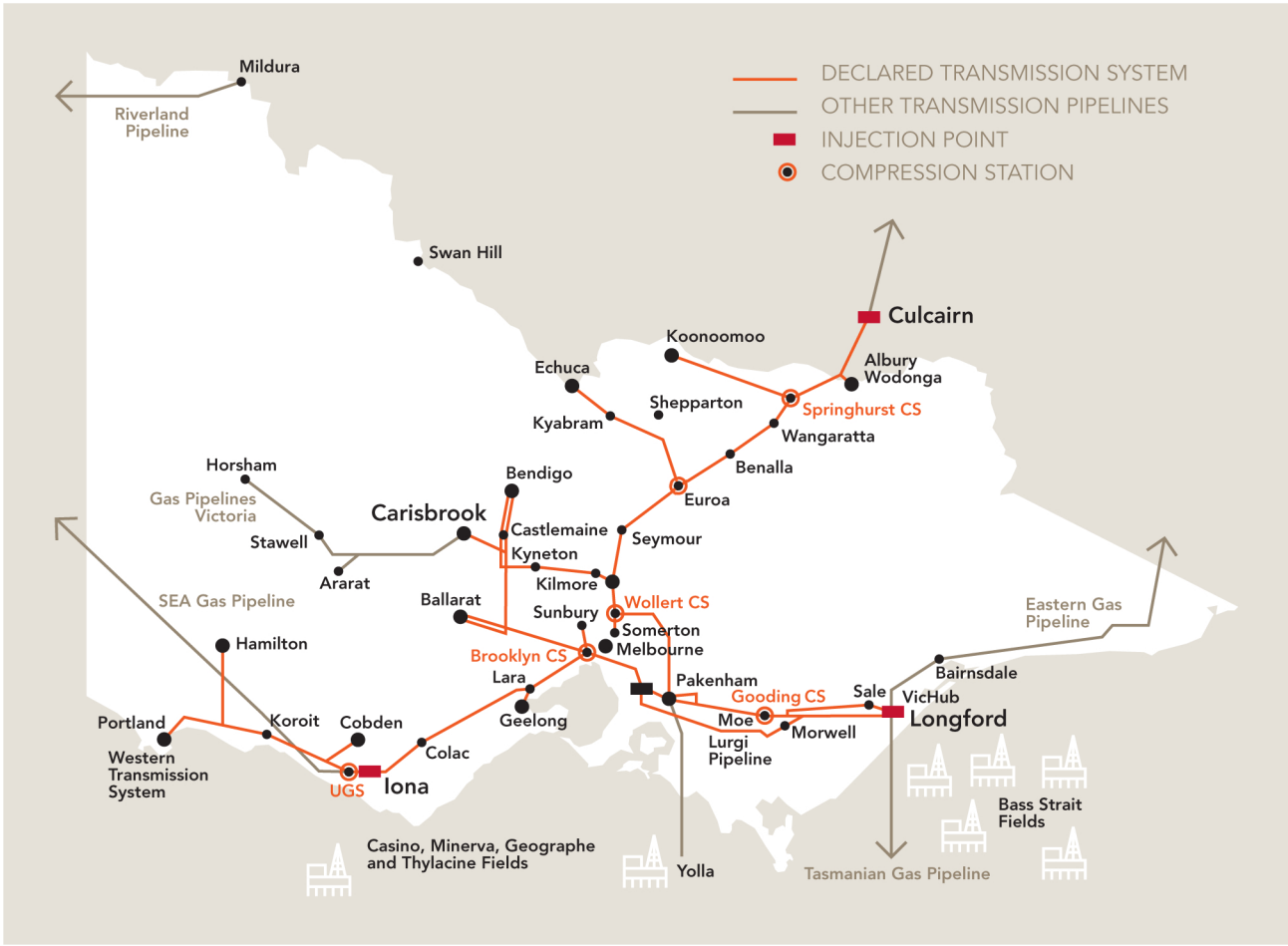
# SECTION 2

## DWGM ARRANGEMENTS

The Wholesale Market arrangements described in this document apply to the Declared Transmission System (DTS), which is depicted in Figure 2. The DTS transports natural gas to the vast majority of Victorian households and businesses.

The DTS transports gas from Longford in the east to and from Culcairn in the north (connecting to the NSW transmission system) and Iona in the west (connecting to South Australia, Otway gas production and underground gas storage facilities).

FIGURE 2: VICTORIAN GAS TRANSMISSION PIPELINES



## SECTION 3

### PARTICIPANTS IN THE DWGM

#### 3.1 Overview

The Wholesale Market in Victoria primarily involves the following Participants, who are depicted in Figure 3:

1. AEMO as the Market Operator;
2. Producers;
3. Storage Providers;
4. Retailers;
5. Traders; and
6. Market Customers.

Other Participants who may be affected by the Wholesale Market, but do not participate directly in the market, include:

1. Declared Transmission System Service Provider;
2. Interconnected Transmission Pipeline Service Providers; and
3. Distributors.

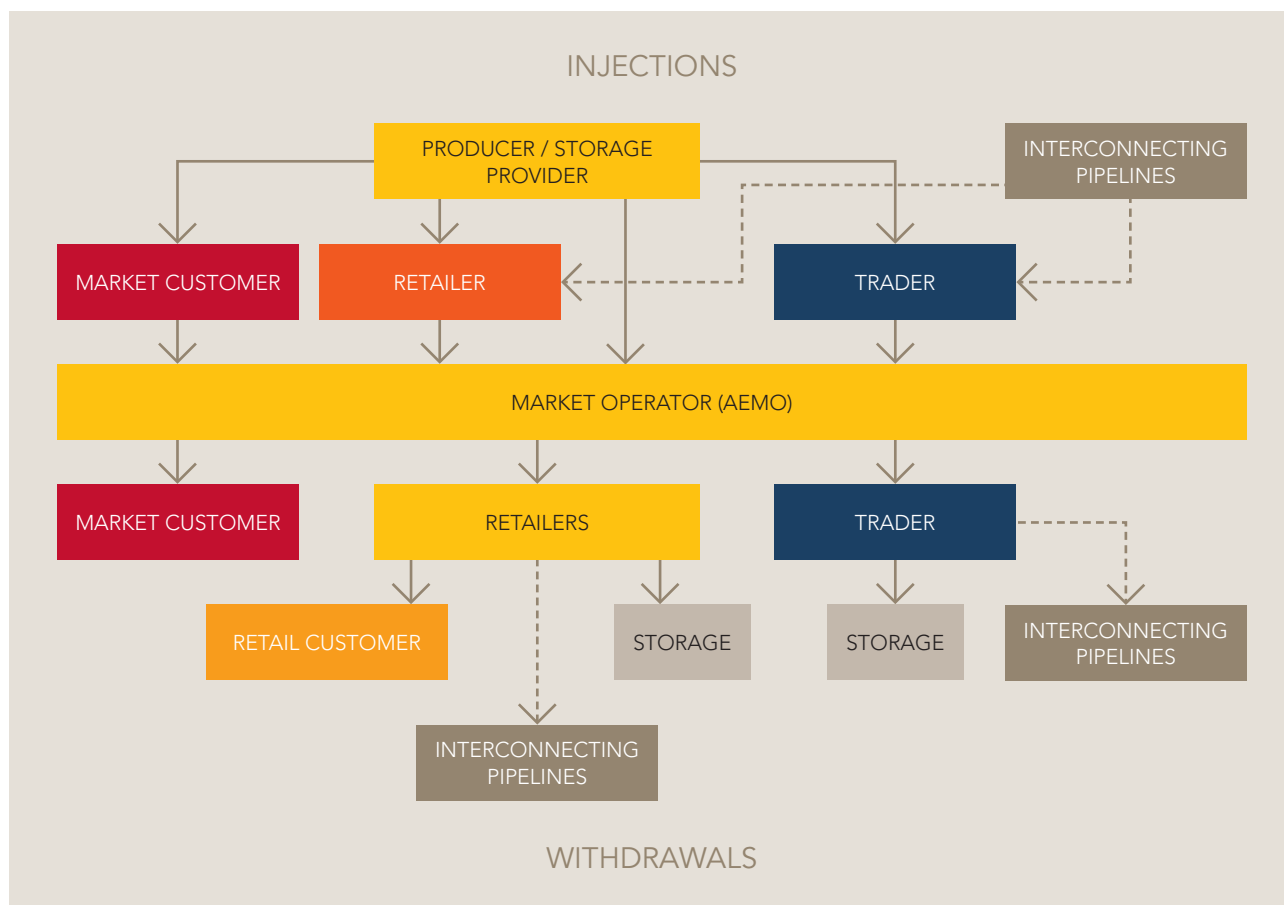
#### 3.2 Market Operator

AEMO is a company limited by guarantee established to manage the national electricity market and wholesale and retail gas markets in southern and eastern Australia from 1 July 2009.

#### 3.3 Producers

Producers undertake the processing of natural gas from fields for injection into the DTS. Producers are market participants when they sell gas directly to the wholesale market. Alternatively, they may be participants when they sell gas through a trader or retailer.

FIGURE 3: DWGM PARTICIPANTS



### 3.4 Storage Providers

Storage providers have facilities that store natural gas that generally has been previously transported through the DTS. This stored gas is subsequently re-injected into the DTS at a later time (e.g. during the peak winter period). Storage providers are market participants if they sell gas directly to the wholesale market. Alternatively, they may be participants if they sell gas through a trader or retailer.

### 3.5 Retailers

Retailers purchase gas from producers, storage providers, Interconnected Transmission Pipeline Service Providers and/or the Wholesale Market and sell this gas to end-use customers. Retailers must be licensed by the Victorian Essential Services Commission.

### 3.6 Traders

Traders buy and sell wholesale gas to/from other market Participants or producers. Traders can also transport gas through the transmission system to an interconnecting pipeline. Traders do not sell gas to end-use customers (since a Retailer license is required for this purpose).

### 3.7 Market Customers

A small number of large gas customers (called 'Market Customers') have elected to participate directly in the Wholesale Market. Market Customers must register with AEMO to participate in the Wholesale Market.

Market Customers are responsible for sourcing their own gas from the wholesale market, and making commercial arrangements for transportation of the gas through the transmission and distribution networks to their premises.

### 3.8 Customers

Most end-use gas customers are generally connected to gas distribution networks and purchase gas from their Retailer of choice.

Customers may be a 'distribution customer', if they are connected to the distribution system, or they may be a 'transmission customer', if they are connected directly to the transmission system.

### 3.9 Declared Transmission System Service Provider

The Declared Transmission System Service Provider (DTSSP) maintains the gas transmission system facilities used to transport the gas between injection (e.g. production or storage facilities) and withdrawal points (e.g. another transmission pipeline or storage facility) as well as to customers or the distribution networks.

### 3.10 Interconnected Transmission Pipeline Services Providers

Interconnected Transmission Pipeline Service Providers own, maintain and operate other transmission pipelines that connect to the DTS. The service providers interface with the Wholesale Market through the connecting flange of their network with the DTS.

### 3.11 Distribution Businesses

Distribution businesses (Distributors) own and operate the lower pressure distribution networks. Distributors transport gas through their distribution pipelines to end-use customers.

## SECTION 4

# THE NATIONAL GAS RULES

Operation of the wholesale market is governed by a set of processes, responsibilities and obligations which are set out in the Declared Wholesale Gas Market Rules (DWGMR), which form Part 19 of the National Gas Rules (NGR).

### 4.1 Purpose

The NGR:

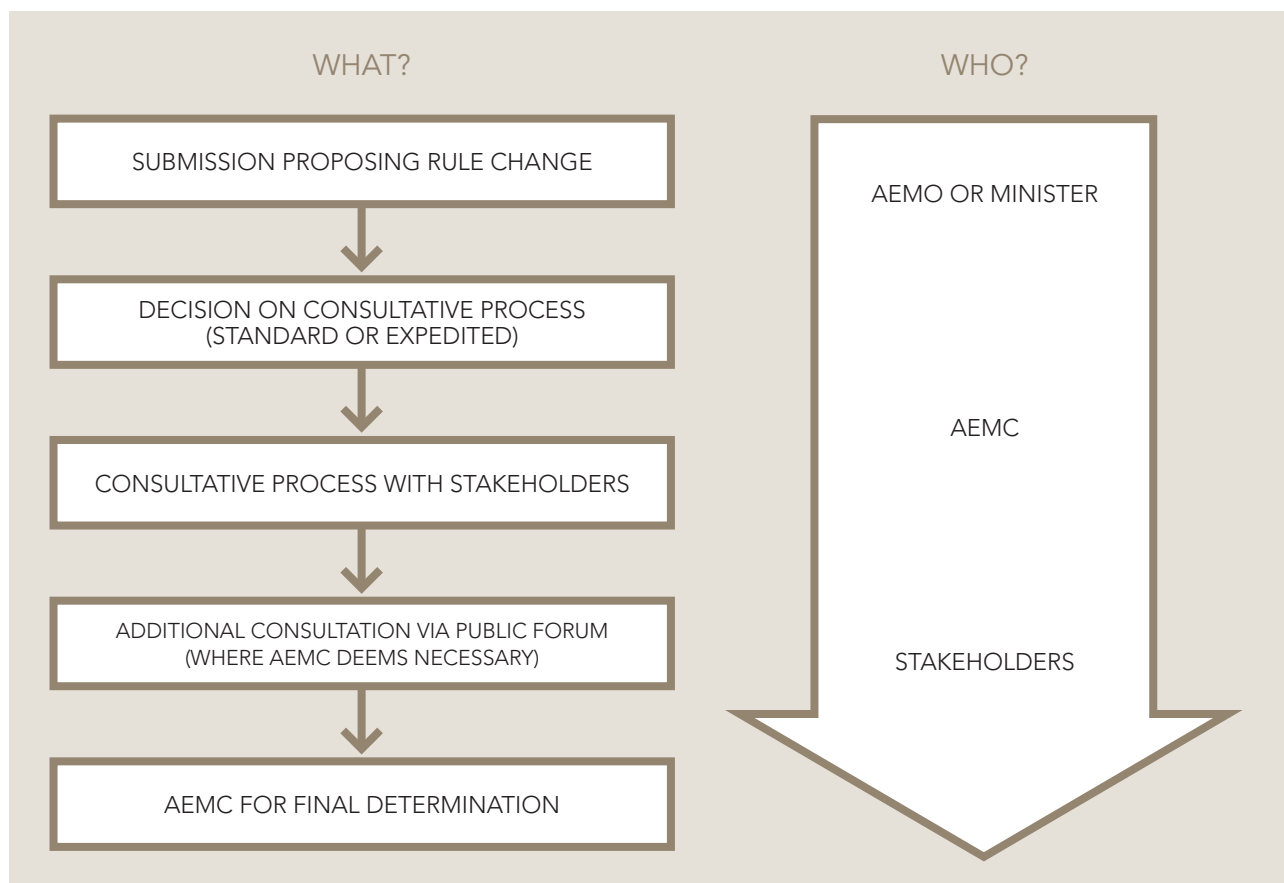
- provide an efficient, competitive and reliable Wholesale Market for natural gas;
- regulate the operation and administration of the Wholesale Market;
- regulate activities of parties using the DTS and Wholesale Market;
- provide for open access to the DTS; and
- provide for the management of system security and safety.

### 4.2 Scope of the NGR

In summary, the NGR cover the following areas:

- Participation in the Wholesale Market – i.e. who is involved;
- Requirements for participation (e.g. prudential requirements);
- Nominations and bidding processes;
- Scheduling of gas;
- Setting the Wholesale Market price;
- Metering;
- Settlement of the Wholesale Market;
- Management of system security;
- Dispute resolution; and
- Rule change process.

FIGURE 4: THE CHANGE PROCESS FOR PART 19 OF THE NGR



### 4.3 How can the rules be changed?

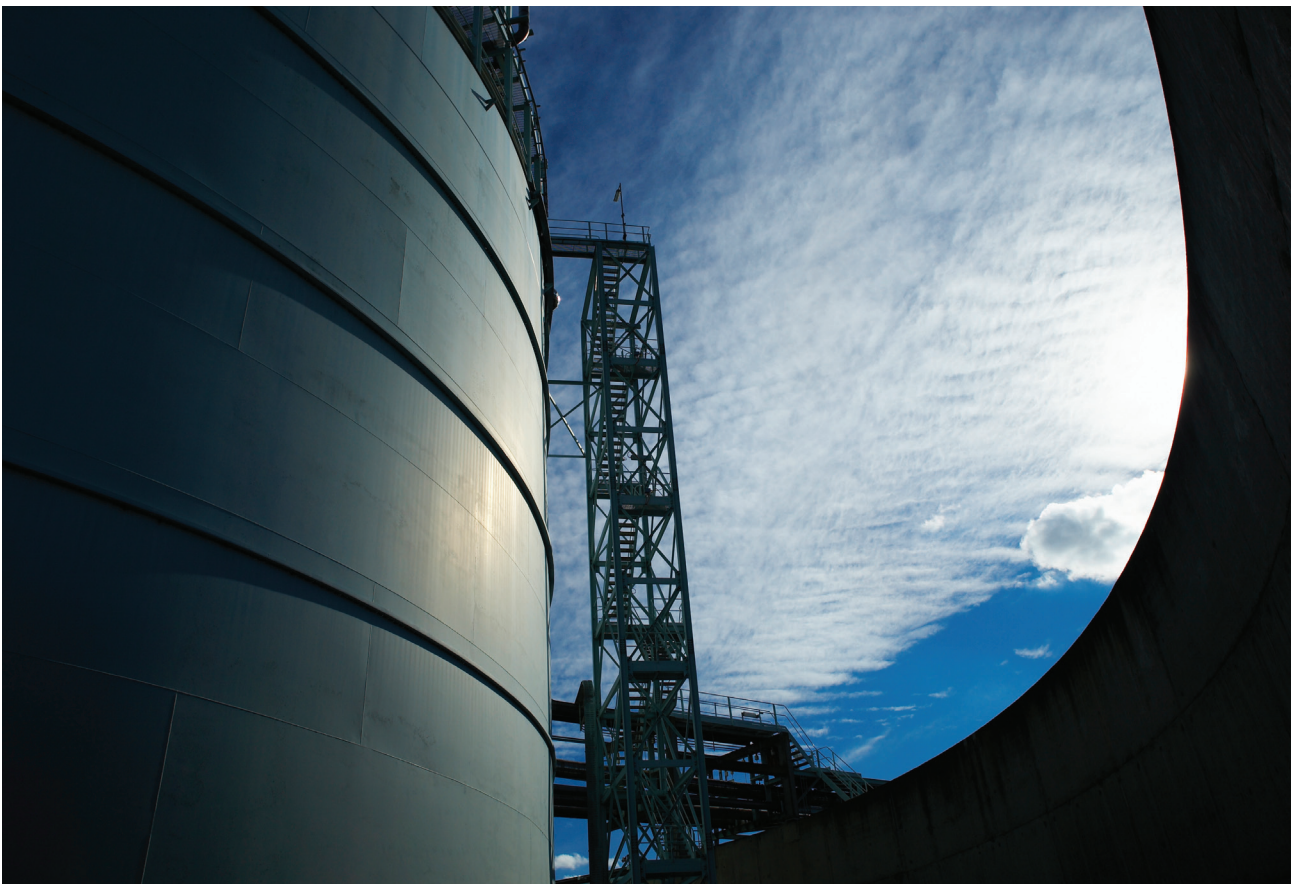
It was recognised from the outset that the NGR would need to evolve and change over time with changes in market conditions. Therefore, the NGR contains its own defined rule change process.

An underlying principle of this change process is to foster clarity, openness and transparency. An important component of the rule change process is to promote input from all stakeholders that are impacted by a rule change proposal.

To facilitate the rule changes process, a gas market consultative forum was established to make recommendations on proposed rule changes. AEMO chairs the forum and the membership is comprised of representatives from AEMO, Traders, Market Customers, Interconnected Transmission Pipeline Service Providers, Distributors, Storage Providers and Retailers. The responsibility of the forum is to consider and make recommendations on rule change proposals which are then submitted to the AEMC for approval.

The rule change procedure is shown in Figure 4, and may be summarised as a sequential process as follows:

1. Only AEMO or a Minister of the adoptive jurisdiction can propose a rule change by making a submission to the AEMC;
2. A decision is made on which applicable consultation process is to be used (Standard, Expedited or Fast Track);
3. Having received a change proposal, a consultative process is undertaken with stakeholders' views being sought and responses considered by the AEMC;
4. Additional consultation may be sought via a public forum where the AEMC deems it necessary;
5. The AEMC gives its final determination and making of the rule.



## SECTION 5

# KEY CONCEPTS OF THE DWGM

The following describes the key design concepts used in the DWGM.

### 5.1 Withdrawals and Injections

A gas day is 24 hours, commencing at 6 am Eastern Standard Time. During a gas day, Market Participants will make withdrawals from and injections into the DTS. While injections are always controllable, withdrawals can be either controllable or uncontrollable. These terms refer to whether or not the injections and withdrawals are price sensitive.

Those Market Participants who put bids into the Wholesale Market make controllable withdrawals and injections. A controllable withdrawer places a bid into the Wholesale Market, indicating that they are willing to pay up to that amount to use a quantity of gas. Similarly, a controllable injector bids to inject gas into the DTS and these bids are either accepted or rejected by the Wholesale Market. (See 5.2 Scheduling and 5.3 Pricing).

Those Market Participants who withdraw gas at any price make uncontrollable withdrawals.

### 5.2 Scheduling

#### 5.2.1 Beginning of Day (BOD) Schedule

At the beginning of each gas day, a schedule is produced which defines, amongst other things, the hourly gas injections into and withdrawals from the DTS. This schedule is based on:

- hourly aggregate demand forecasts provided by Market Participants with uncontrollable withdrawal (Note: AEMO retains an override feature whereby it can modify total system demand by hour so as to ensure system security);
- hourly site demand forecasts provided by Market Participants for large loads; and
- daily bids submitted by Market Participants for their controllable injections and controllable withdrawals.

Also based on the criteria above, AEMO will declare a market price at the beginning of the day. This market price will be used for the financial settlement of gas that is injected into, and withdrawn from the DTS as a result of the 6 am "schedule".

At the beginning of each gas day, a schedule is produced which defines, amongst other things, the hourly gas injections into and withdrawals from the DTS.

### 5.2.2 Reschedules

A reschedule is a schedule determined after the BOD for the purpose of updating scheduling instructions (in the operational schedule) and market prices (in the pricing schedule). AEMO will reschedule for the current gas day by revising or updating the schedules at intervals of 4 hours during the day, with a larger 8 hour interval applying overnight: i.e. 10 am, 2 pm, 6 pm, and 10 pm.

This reschedule determines prices and quantities for all the remaining hours in the gas day (i.e. less than 24 hours). A reschedule can include updated Market Participant demand forecasts, updated Market Participant bids and any changes to parameters under the control of AEMO. Market Participants may update their bids and demand forecasts up to one hour prior to the time a reschedule takes effect.

### 5.2.3 Ad Hoc Reschedules

On occasion, AEMO may have to reschedule between standard schedule times for system security purposes. AEMO will only do so if it must reschedule to address an impending, emerging, or current threat to system security, and it is not able to wait until the next standard schedule time before rescheduling.

These ad hoc schedules supersede the current operational schedule, but do not impact on the prevailing market price.

### 5.2.4 Day Ahead Schedules

To provide a back up for cases where there is a failure of the IT system, and to provide market participants with an indication of future market conditions, AEMO produces forecast schedules for the next gas day. These schedules are produced at 8am, 4pm and midnight, based on Market Participant bids and forecasts for that day, where these can be revised for each update. An additional schedule will be produced at noon, for the gas day two days in the future, again based on Participant bids and forecasts for that day.

## 5.3 Pricing

The market price, which can vary between \$0 and \$800/GJ, is calculated by assuming that there are no physical limitations on the pipeline (called constraints) and is determined five times each gas day at the standard reschedule times.

Participants offer gas into the Wholesale Market through a competitive bidding process. These bids are simply stacked in order of price and cleared against the total forecast demand.

FIGURE 5: MARKET BID STACK



## 5.4 Imbalance Payments

Market Participants generally endeavour to align their supply and consumption quantities so as to minimise their exposure to the Wholesale Market. However, most of the time, there is an “imbalance” between the scheduled supply of gas by a Market Participant, and the scheduled consumption of gas by that Market Participant and their customers.

This imbalance quantity will be calculated each time AEMO runs a schedule, and Market Participants will receive a payment or charge for their imbalance at the applicable market price.

In the example in Figure 6, if a Market Participant is scheduled to inject 50 TJ of gas and forecasts that it will consume 51 TJ of gas at the 10 am schedule, then it will

pay an imbalance payment for the 10am reschedule equal to  $(51-50)=1$  TJ multiplied by the relevant 10am market price.

Suppose that at the 2pm reschedule, the market Participant forecasts to consume 53 TJ of gas but continues to be scheduled to inject 50 TJ. It has already purchased 51 TJ of gas at the 10am schedule, so must only purchase the difference of 2 TJ at the revised market price, in this case \$3.50/GJ. (Note,  $1000\text{GJ}=1\text{TJ}$ ).

In the example in figure 7, if the Market Participant's demand forecast at 2pm had dropped to 49 TJ, then it could sell  $(51-49)=2$  TJ back to the market, effectively earning the revised market price (in this case, \$3.50/GJ) on its reduced consumption.

FIGURE 6: IMBALANCE PAYMENT (POSITIVE IMBALANCE)

Time	Scheduled Injection	Forecast Consumption	Imbalance	Change in imbalance	Market Price \$/GJ	Imbalance Payment
6am	50TJ	50TJ	$50-50 = 0\text{TJ}$	N/A	3.000	\$0.00
10am	50TJ	51TJ	$51-50 = 1\text{TJ}$	$1-0 = +1\text{TJ}$	3.000	$\$3.00 \times 1000\text{GJ} = \$3000.00$
2pm	50TJ	53TJ	$53-50 = 3\text{TJ}$	$3-1 = +2\text{TJ}$	3.500	$\$3.50 \times 2000\text{GJ} = \$7000.00$

FIGURE 7: IMBALANCE PAYMENT (NEGATIVE IMBALANCE)

Time	Scheduled Injection	Forecast Consumption	Imbalance	Change in imbalance	Market Price \$/GJ	Imbalance Payment
6am	50TJ	50TJ	$50-50 = 0\text{TJ}$	N/A	3.000	\$0.00
10am	50TJ	51TJ	$51-50 = 1\text{TJ}$	$1-0 = +1\text{TJ}$	3.000	$\$3.00 \times 1000\text{GJ} = \$3000.00$
2pm	50TJ	49TJ	$49-50 = -1\text{TJ}$	$-1-1 = -2\text{TJ}$	3.500	$\$3.50 \times -2000\text{GJ} = -\$7000.00$

### 5.5 Deviation Payments

A deviation payment is a Market Participant payment arising from the differences between their actual and scheduled quantity.

A deviation payment is made to a Participant if they inject more than their scheduled injections, or they withdraw less than their scheduled withdrawals.

If, on the other hand, a Participant injects less than its scheduled injections, or withdraws more than its scheduled withdrawals, then the Participant must pay the price determined in the next schedule, that is, in the schedule following the scheduling interval in which the deviation occurred.

The deviation payment then, is the difference between a Market Participant's scheduled and actual imbalance in a scheduling interval, multiplied by the market price applying from the next standard scheduling time.

Deviations are paid at the next schedule price because variations in a Market Participant's actual behaviour will impact on linepack at the time the next schedule is produced.

Linepack is a term used to describe the amount of gas stored in the pipeline at any time.

Changes in linepack will influence the market price determined at that schedule for the next scheduling horizon. In the case of deviations occurring in the last standard scheduling interval of the gas day (from 10pm to 6am), the relevant market price will be the BOD gas price for the following gas day.

FIGURE 8A: DEVIATION PAYMENT

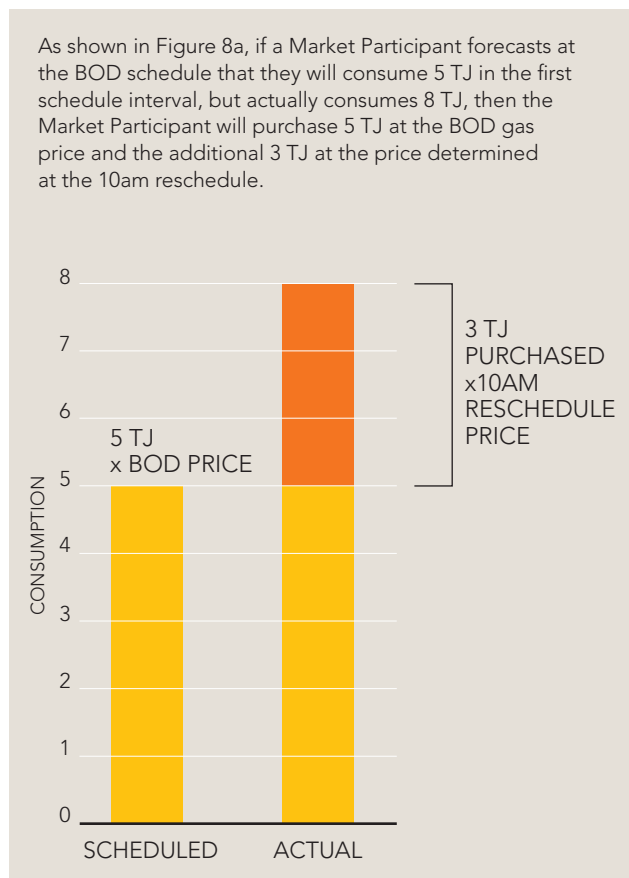
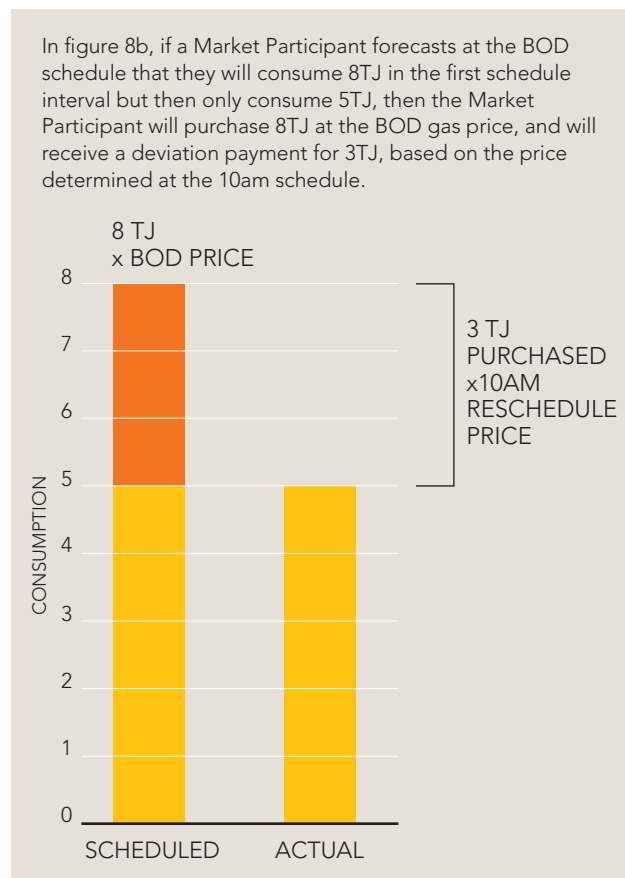


FIGURE 8B: DEVIATION PAYMENT



## 5.6 Ancillary Payments

### 5.6.1 The Concept

There may be times when, to meet local or short-term requirements for gas within a day, AEMO will need to schedule additional injections of gas that have been offered at a price which is higher than the resulting market price (otherwise known as “constrained on”).

In these cases, the Market Participants who have injected the higher priced gas, in accordance with the instructions of AEMO, will be compensated so that they are not put at a disadvantage in comparison to the market price. Such compensation is called “Ancillary Payments”

### 5.6.2 Other Ancillary Payment Concepts

There are other important concepts relating to ancillary payments, which are further outlined in the Technical Guide to Victoria’s Declared Wholesale Gas Market.

These important concepts are summarised below:

- Ancillary payments will only be paid when a Participant actually injects the gas they were scheduled to inject
- Ancillary payments will not be paid to a Market Participant when the gas was scheduled as a result of a Participant constraint (e.g. a plant limitation)
- Gas injections used for generating AMIQ/ uplift hedge are not entitled to ancillary payments (see 5.8 AMIQ). Uplift hedges will not impact upon ancillary payments for controllable gas withdrawals
- When a reschedule is performed, ancillary payments may be increased or decreased to the extent that there is an increase or decrease in the amount that the Participant is constrained on in that schedule
- The ancillary payment regime recognises that Market Participants may attempt to re-bid during the day to increase ancillary payments so incentives are employed to prevent this.

For a full description of ancillary payments, please refer to the Ancillary Payments Procedures listed on the AEMO website [www.aemo.com.au](http://www.aemo.com.au)

*For example, say a Market Participant’s offer to inject 100 GJ of gas at \$12.50/GJ is called upon to resolve a localised pressure constraint for a few hours of the day.*

*The market price, which is determined without regard to pipeline constraints, is set at \$2.50/GJ. The Market participant is paid the market price, for the 100 GJ of gas injected.*

*The difference the offered price and the market price is:*

$$\text{\$12.50/GJ} - \text{\$2.50/GJ} = \text{\$10.00/GJ}$$

*Thus, the Ancillary Payment made to the Market Participant is:*

$$\text{\$10.00/GJ} \times 100 \text{ GJ} = \text{\$1000.00}$$

*This money, the ancillary payment, is paid to a Market Participant for injecting gas under the scheduling instruction.*

## 5.7 Uplift Charges

### 5.7.1 The Concept

Uplift charges are the mechanism used to recover the cost of ancillary payments from Declared Transmission System Service Providers (DTSSPs) and/or Market Participants. As far as practicable, uplift charges are allocated to those Participants whose actions contributed to the generation of the ancillary payments. The cost of ancillary payments will be recovered via uplift, calculated for each schedule. Before uplift payments are calculated, any opposite ancillary payments are aggregated (or netted off) to the earliest possible schedule. In this way, net ancillary payments will equal uplift for each schedule.

### 5.7.2 Types of Uplift Charges

There are four different types of uplift charges, as shown below. 'DTSSP Congestion Uplift' will be allocated between the DTSSPs, whilst 'Participant Congestion Uplift', 'Surprise Uplift' and 'Common Uplift' will be allocated between Market Participants (Retailers, Traders and Market Customers).

DTSSP Congestion Uplift reflects the cost impact of reductions in system capacity caused by failures of the DTSSP to meet its service envelope capacity, as defined in its Service Envelope Agreement with AEMO.

Participant Congestion Uplift is linked to Market Participant exceeding their AMIQ / uplift hedge (see 5.8 AMIQ).

Surprise Uplift is related to events whereby Market Participants have failed to follow their schedule, or have changed their forecast. Such events can create a surprise for the system that could cause increased ancillary payments.

Common Uplift is a "catch all" for any uplift that is generated in the market that cannot otherwise be allocated. Common Uplift is expected to be small, and will be allocated to Market Participants each day in proportion to daily withdrawals ("smeared").

## 5.8 Authorised Maximum Interval Quantity (AMIQ)

AMIQ is a form of authorisation which allows customers to use gas up to a specified Interval amount (the 'authorised maximum interval quantity') without attracting the allocation of additional uplift charges which have arisen from congestion on the DTS. On days when congestion occurs on the DTS, registered wholesale Market Participants whose customers have exceeded their AMIQ/uplift hedge on the day may face congestion uplift charges for their excess or unauthorised use of the DTS.

Through AMIQ, the Victorian gas wholesale market delivers pricing signals to gas users, and also provides a mechanism for prioritising access to the transmission pipeline system at times of congestion.

The DTS in Victoria currently has sufficient capacity to supply all consumers' gas needs without suffering congestion on the pipeline on all but a few days of the year. In the event that part or all of the pipeline system becomes congested, it may be necessary for AEMO to reschedule gas supplies and/or deliveries to ensure appropriate pressures are maintained throughout the DTS.

In rare and extreme circumstances when severe congestion occurs, it may be necessary to curtail customer usage of gas to maintain safe working pressures on the DTS. Those gas users without AMIQ, or exceeding their AMIQ, will be required to reduce their usage of gas ahead of authorised users.

## SECTION 6

### HOW DO I BECOME A PARTICIPANT?

Figure 9 below lists some of the requirements that a Participant will need to fulfil in order to register with AEMO and any other organisational requirements which may need to be met.

#### 6.1 Register with AEMO

AEMO will provide registration kits for those seeking to become a Participant in the market. The registration kit contains information regarding Participant obligations.

Before AEMO approves a registration, intending Participants need to meet obligations applicable to their relevant Participant category. Some of these obligations remain ongoing throughout the period that the Participant remains registered with AEMO.

#### 6.2 Gas Transportation Deed

Charges for use of the transmission pipeline are imposed and collected by the pipeline owner.

Prior to 1 January 2008, Market Participants had to enter a Gas Transport Deed to pay transmission charges, but with changes to the transmission Access Arrangement, these are no longer needed.

#### 6.3 Prudential Requirements

A person or business intending to become a Market Participant (such as a retailer, trader or market customer) who will make gas Wholesale Market payments, must provide appropriate financial securities in the form of a bank guarantee as defined in the MSO Rules, to cover potential liabilities to the market.

#### 6.4 Connect to the AEMO IT System

To participate in the Wholesale Market a Participant must connect to the Market Information Bulletin Board (MIBB) to receive Wholesale Market information from AEMO.

A Market Participant must also use the WebExchanger (WEX) to provide information such as bids, forecast demand and hedge nominations to AEMO.

FIGURE 2: VICTORIAN GAS TRANSMISSION PIPELINES

\*Distribution customers only

Organisation Imposing Requirement	Requirement	Retailer	Trader	Market Customer
AEMO	Register with AEMO as a Participant in the appropriate category	✓	✓	✓
	Sign the Gas Transportation Deed	NA	NA	NA
	Meet prudential requirements	✓	✓	✓
	Connect to the AEMO IT system	✓	✓	✓
Essential Services Commission	Retail License	✓		
Energy Safe Victoria	Approved Gas Safety Case	✓		
Distributors	Agreed Distribution Use of System Agreement	✓		✓*

## GLOSSARY

AEMO	Australian Energy Market Operator
AEMC	Australian Energy Market Commission
AMDQ	Authorised Maximum Daily Quantity
AMIQ	Authorised Maximum Interval Quantity
BOD	Beginning of Day
DTS	Declared Transmission System
DTSSP	Declared Transmission System Service Provider
GJ	Gigajoule – $1000\text{GJ} = 1\text{ TJ}$
MIBB	Market Information Bulletin Board
NGR	National Gas Rules
TJ	Terajoule – $1\text{ TJ} = 1000\text{ GJ}$
WEX	Web Exchanger



# DWGM REFERENCE DOCUMENTS

There are a number of reference documents under the National Gas Rules (NGR) and additional guides for participants involved with the wholesale market. A Technical Guide to Victoria's Declared Wholesale Gas Market, along with gas market guides and additional information, can be found on the AEMO website ([www.aemo.com.au](http://www.aemo.com.au)).

## Guide

- Technical Guide to Victoria's Declared Wholesale Gas Market

## Procedures and Guidelines

### Gas Scheduling

- Gas Scheduling Procedures
- System Security Procedures
- Connection Approval Procedures
- Demand Override Methodology
- Accreditation Procedures
- Maintenance Planning Procedures

### Settlements

- AMDQ Transfer Algorithm
- AMDQ Transfer Procedures
- AMDQ Transfer Guidelines
- AMDQ Credit Nomination Process
- AMDQ Auction Procedures
- Administered Pricing Procedures
- Ancillary Payment Procedures
- Ancillary Payment Functional Design
- Compensation Procedures
- Uplift Payment Procedures
- Uplift Payment Functional Design

### Emergency

- Gas Emergency Protocol
- Gas Load Curtailment and Gas Rationing and Recovery Guidelines

### Data Access

- Electronic Communication Procedures
- WebExchanger User Guide
- MIBB Report Participant Guide

### Metering

- Gas Quality Guidelines
- Interval Meter Registration Process
- Metering Communication Procedures
- Energy Calculation Procedures
- Data Validation Procedures
- Metering Uncertainty and Calibration Requirements Procedures
- Metering Register Procedures
- Installation Database Procedures
- Distribution UAFG Procedures
- Interval Meter Registration Process

## Other Documents

- **The Victorian Gas Industry Act**  
Available from the Victorian Legislation and Parliamentary Documents website [www.legislation.vic.gov.au/](http://www.legislation.vic.gov.au/)
- **National Gas (South Australia) Act 2008 (The National Gas Law)**  
Available from the South Australian Legislation website [www.legislation.sa.gov.au/browseActs.aspx](http://www.legislation.sa.gov.au/browseActs.aspx)
- **National Gas Rules**  
Available from the Australian Energy Market Commission website [www.aemc.gov.au](http://www.aemc.gov.au)
- **Retail Market Procedures**  
Available from AEMO website [www.aemo.com.au/retailgas/procedures.html](http://www.aemo.com.au/retailgas/procedures.html)



# GAS

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