

8 June 2010

Mr John Pierce Chairman Australian Energy Market Commission PO Box A2449 Sydney South NSW 1235

FROM THE OFFICE OF THE CHIEF EXECUTIVE OFFICER

Level 12 15 William Street Melbourne VIC 3000

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Submitted online

Dear Mr Pierce,

Re: National Gas Rule Change Proposal for the Dandenong Liquefied Natural Gas Storage Facility (LNG Facility)

AEMO requests that the AEMC consider making a Rule change under section 295 of the National Gas Law (NGL). The proposed Rule change seeks to amend Part 19, Division 3, Subdivision 2 of the National Gas Rules (NGR) to remove or amend rules relating to the operation of the LNG Facility that are now considered overly prescriptive and unnecessary due to a reduced reliance on LNG for system security. The current prescriptive nature of these rules is also hindering the commercial development and operation of the Dandenong LNG facility.

A description and drafting of the proposed Rules, a statement of the issues concerning the existing NGR and a description of the consultation process, and how the proposed Rule contributes to the achievement of the national gas objective (NGO) is provided in Attachment A.

AEMO would be pleased if you could have these matters considered by the AEMC. For further details, please do not hesitate to contact Franc Cavoli on (03) 9609 8416.

Yours sincerely

M. Zem

Matt Zema

Managing Director and Chief Executive Officer

Attachments: Rule Change request



ATTACHMENT A - National Gas Rule Change Proposal for the Dandenong Liquefied Natural Gas Storage Facility (LNG Facility)

1 Background

1.1 Liquefied Natural Gas (LNG)

Natural gas can be condensed to liquefied natural gas (**LNG**) by cooling it to very low temperatures achieving a greatly reduced volume which can then be stored under normal pressures in a holding tank. Stored LNG can be vaporised and reinjected into a gas transmission system at a later time if necessary to support gas supplies to meet peak demand. Alternatively LNG can be efficiently transported by truck or otherwise for use at other locations. LNG can also be used for heavy haulage truck fleet fuelling as a cheaper and lower carbon emissions alternative to diesel, though this has been limited to date due to lack of available liquefaction capacity.

1.2 The LNG Facility

APA Facilities Management Pty Ltd (**LNG Storage Provider**), a member company of the APA Group, is the owner and operator of the 12,000 tonne LNG storage facility (**LNG Facility**) at Dandenong, 30 km south east of the Melbourne CBD. The LNG Facility for the past 30 years has provided LNG liquefaction, storage and vaporisation services to statutory instrumentalities of the State of Victoria prior to the creation of the Victorian wholesale gas market and to Market Participants since the inception of that market. The facility also provides a small number of services to people outside this market such as providing LNG to trucking companies. The liquefaction services are provided through APA under contract from the industrial gas company BOC.

1.3 Use of LNG in the DWGM

After the Victorian wholesale gas market commenced in 1999, section 4.2 of the Victorian Market and System Operations Rules (MSOR) (now detailed in Part 19, Division 3, Subdivision 2 of the National Gas Rules (NGR)) provided certainty of operation of the LNG Facility for Market Participants and AEMO in its system security function. This recognised that LNG was the only alternative to gas supplied from Longford in the Victorian system at that time to manage system security at times of system constraints and, in particular, gas emergencies.

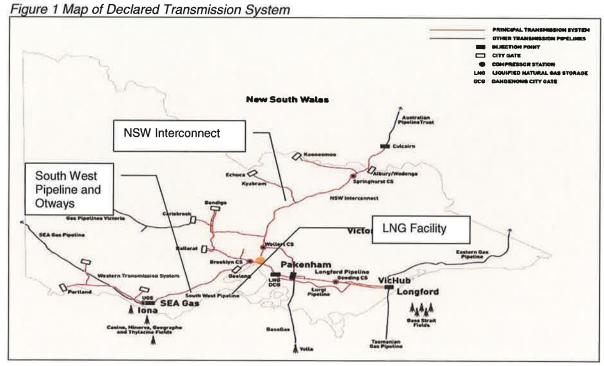
Among other rules aimed at ensuring LNG stock was maintained at all times, NGR rules 281(2) and (3) provide for storage capacity to be made available to AEMO as an "LNG Reserve". Rule 281(2) states that this quantity is to be 3,000 tonnes "unless and until AEMO agrees otherwise". These rules were written prior to market start in 1999 and the purpose of this reserve was to ensure that there would always be LNG stock maintained in the LNG Facility in order to maintain minimum system pressures enabling the system to be shut down safely in the event of a gas emergency. The AEMO LNG reserve could only be used if all other LNG stocks had been depleted, and only in the event of an emergency (not to maintain gas supplies to customers). AEMO's costs in contracting with APA GasNet for this LNG



reserve (which for the original 3,000 tonnes were in excess of \$2 million per annum) were passed through to Market Participants by separately identified AEMO fees.

Since market start, additional sources of gas have been introduced to the Victorian DTS and confidence has been gained with the market providing appropriate pricing signals and incentives to ensure LNG stocks are maintained. In 2007, a review was undertaken, in consultation with Market Participants and Energy Safe Victoria (ESV) of the need for AEMO to maintain its LNG Reserve. Consequently, the LNG Reserve held by AEMO was reduced in two stages: to 1,500 tonnes in 2008; and to zero in 2010. ESV accepted these reductions on the basis that adequate provisions would be maintained in both the NGR and in agreements between AEMO and APA GasNet to provide safeguards against depletion of LNG stock levels. It is noted that ESV has powers of direction for matters of gas safety under the Victorian Gas Safety Act. Consequently, these provisions are to remain under the proposed rule change. Further background on this can be found in Appendix 5.

Although no longer as critical as it was at market start, the LNG Facility is still important to the Victorian Declared Wholesale Gas Market (**DWGM**) due to its proximity to Melbourne and the ability to use LNG for peak shaving on high demand days i.e. to manage transmission constraints. However, the connections of the South West Pipeline to new gas production plants and underground storage in the Otway Basin, BassGas and the NSW Interconnect to Melbourne (shown in the figure below) mean there are several alternative supply sources so that LNG is no longer as critical for emergency management as it historically has been.



¹ The Consultation documentation is available at http://aemogas.com.au/index.php?action=filemanager&folder_id=902



The LNG Storage Provider (APA Facilities Management) operates the LNG Facility by purchasing LNG liquefaction services from the LNG supplier (BOC) and storing the liquefied gas in the LNG Facility for later use by those Market Participants who have contracted for storage capacity.

BOC recently announced a major redevelopment of its Dandenong facility which will mean that liquefaction capacity available to the broader market will be trebled from 50 tonnes/day to 150 tonnes/day. The broader gas market includes the emerging heavy haulage fleet fuelling market, and potentially those trucking LNG to other sites for more vaporisation into networks for conventional use, including the DWGM. Some of this additional capacity can only be taken up by Market Participants in the DWGM if LNG arrangements under the NGR become more flexible.

2 Issues

The existing Rules raise the following issues:

- (a) APA Group maintains and AEMO agrees that the Rules impede APA's capability to offer services from the LNG Facility in an efficient and innovative manner that provide for a range of users with different LNG needs, for example, faster liquefaction;
- (b) the NGR relate to past use of the LNG Facility where with the exception of a small amount of storage capacity, all storage was made available and used for the DWGM, all vaporisation capacity was used in the DWGM and available liquefaction capacity is at a set level that has not changed;
- (c) the NGR limits LNG contracts so that they are primarily based on storage capacity rather than the equally important liquefaction and vaporisation capacities. The Rules do not contemplate and do not provide for material changes in capacity of any the three types of LNG Facility capacity i.e. storage, liquefaction or vaporisation available to the DWGM or the use of some of that capacity outside the DWGM:
- (d) the LNG Facility is not as critical for gas emergencies as it was before the alternative gas supply sources were established;
- (e) the prescriptive liquefaction allocation rules are a barrier to Market Participants investing in increased liquefaction capacity, or taking up any of the liquefaction capacity that has recently been released at the LNG Facility as the LNG Storage Provider has no ability to offer this additional liquefaction capacity to the market;
- (f) under current arrangements LNG vaporisation capacity is shared and this does not enable incentives for future expansion of vaporisation capacity should it be needed; and
- (g) many of the obligations in the rules are covered more comprehensively in an operating agreement between APA and AEMO (formally VENCorp) (**Operation Agreement**). In particular the Operation Agreement specifies the provision of information to AEMO regarding planned and unplanned maintenance and plant breakdowns that will materially impact the injection or withdrawal of gas into or out of the Declared Transmission System. The Operation Agreement also specifies the minimum injection rate that the LNG Storage Provider must be capable of injecting into the Gas Transmission System on each Gas Day. The LNG Operational agreement is reviewed from time to time to assess availability of LNG for emergencies and system security.



3 Reasons for the Rule Change

A number of reasons have been put forward for the Rule change proposal:

3.1 System Security

The existing Rules provisions were drafted to enable AEMO as system operator to ensure availability and use of LNG capacity for system security purposes. As noted above, the connections of the South West Pipeline to new gas production plants and under ground storage in the Otway Basin, BassGas and the NSW Interconnect to Melbourne have resulted in several alternative supply sources. The new supply sources have reduced the importance of the LNG Facility for system security and have removed much of the need for the current prescriptive regime.

However, to the extent that the LNG Facility does provide some residual security capability, these rule changes preserve that capability by providing further investment signals (discussed further below in section 3.3) and by retaining the strong relationship between AEMO and the LNG Storage Provider to ensure certainty of:

- (i) LNG vaporisation as per AEMO's scheduling instructions;
- (ii) communications to AEMO and the market on plant maintenance and availability;
- (iii) publication of LNG Facility stock levels for monitoring purposes; and
- (iv) timely refill of the LNG Facility to maintain adequate LNG stock levels.

These Rule changes are included in order to allow AEMO and Market Participants confidence that the residual security benefits (particularly in the peak shaving periods) that the LNG Facility provides can continue to be maintained.

3.2 Liquefaction and Vaporisation Flexibility

The NGR in effect prescribe that LNG can only be contracted by storage capacity with prescribed liquefaction allocations and shared vaporisation capacity. The Rules have become an impediment to the commercial operation of the LNG Facility preventing it from offering services for faster refill of LNG storage, dedicated firm vaporisation, augmentation of its liquefaction capability, and certainty of LNG tanker loading and/or use by heavy haulage fleets. The owner of the LNG Facility has been unable to contract and sell additional LNG liquefaction services over and above existing contractual rights due to the prescriptive nature of these rules.

3.3 Investment

Investment in baseload gas fired generators (CCGT) to replace coal fired generators and peaking gas fired generators to balance intermittent renewable power on the DTS and elsewhere is likely to lead to a large growth in gas demand. This growth in demand will likely lead to an increase in the frequency and amount of LNG used to manage congestion and, in turn, alter the balance in LNG storage, vaporisation and liquefaction capacities needed by the DWGM.

AEMO contends that this rule proposal should provide incentives for the market to invest appropriately in all three types of LNG capacity and not storage alone. In winter 2007 high



demand from gas fired generation and capacity constraints early in the winter period significantly depleted LNG stock in the tank. The restrictive LNG contracts had no flexibility to allow the LNG Storage Provider to refill the LNG Facility in a timely or accelerated fashion because the maximum liquefaction rate is set in the LNG Provider contract without any NGR provisions to enable this to be changed. There was a serious risk that the LNG stock could be totally depleted leading to frequent load curtailment at great cost to industry and the economy. LNG prices increased to VoLL from the end of June to August which greatly increased financial risks for Market Participants and some of their customers.

The operational changes at the LNG Facility allowed by the proposed amendments would not adversely impact system security or the gas market in general, in fact, they would enable incentives to increase capacity and enhance security management. Given the alternative sources of supply into the DWGM the LNG Facility is no longer as critical to a major system emergency as it has historically been. When Longford was the sole injection source into the DWGM, the LNG Facility played a crucial role in ensuring system integrity during the event of a major supply interruption while maintaining supplies to essential and critical services (e.g. Longford Emergency September 1998). With the connection of the South West Pipeline, the Otways and NSW Interconnect, that system emergency role has been greatly reduced;

3.4 Regulatory and Administrative Certainty

A further benefit of the Rule proposal is that it simplifies the NGR in an area where the previous level of prescription is no longer necessary. This will reduce the administrative cost of the provision of LNG related services to Market Participants and allow the Facility operator to offer other services to participants and people outside the market.

4 Public Consultation

The Gas Wholesale Consultative forum (GWCF) is a standing open forum for providing consultation with all stakeholders on development of the Declared Wholesale Gas Market (DWGM). The GWCF's objective is to:

- facilitate effective and efficient consultation between AEMO and stakeholders for the development of changes to the DGWM Procedures, the National Gas Rules (primarily Part 19), systems and arrangements governing the wholesale market; and
- provide stakeholders with a forum to raise and address issues relating to the operation and functionality of the wholesale market.

A summary of the key dates and the issues raised in consultation with participants of the GWCF follows and can be found in greater depth in Appendix 3:

- In March 2009 APA Group met with AEMO to discuss the question of changing the Rules applying to the LNG Facility on the basis that any changes would not adversely impact system security or the DWGM. It was recognised that there was scope to streamline the Rules and there were potential benefits to the market in doing so;
- On 22 September 2009, the issue of simplifying LNG storage rules was formally raised at the GWCF meeting 152 in the paper GWCF 09-053-01 APA LNG DWGM Rule Changes. A draft of rule changes was presented for consideration. APA agreed to



annotate the rationale for each changed clause in the draft and issue this for further discussion at the next GWCF meeting; and

On 20 October 2008, the subsequent paper (GWCF 09-053-02 APA LNG DWGM Rule Changes) was presented at GWCF meeting 153. Participants of the meeting engaged in detailed discussion of the issues and options, this resulted in a number of minor changes to be made for the final draft. Further comments were invited for consideration for the revised draft to be discussed at the GWCF on November 17 2009.

A final draft of the proposed rule change was published in the paper *GWCF 09-053-03 APA LNG DWGM Rule Changes*, and the forum proposed that AEMO progress the rule change.

AEMO also publicly advertised the proposed rule change and requested submissions to the proposal. Two submissions were received and the details of those submissions including how AEMO has dealt with them are set out in Appendix 3.

To summarise, two issues were raised; the first dealing with system security, and the second querying whether an "as-available" arrangement for LNG service with APA can be bid into the DWGM as a "non-firm" bid. In the former, Origin Energy argued that the removal of prescriptive rules may cause APA to move its focus further away from system security. This is a valid observation but AEMO contends that emergency management is not APA's primary obligation and notes that Market Participants have commercial incentives to ensure they have adequate LNG to manage their loads and market exposure. Both AEMO and ESV² will continue to monitor the usage, forecast use and availability of LNG and/or alternatives for emergency purposes and therefore have a clear and continuing role in ensuring ongoing security of gas supply. It is also noted that rule 279(1) will continue to oblige APA to maintain the LNG stock at the highest level possible.³

Infratil noted that the Consultation Paper stated that a Market Participant may negotiate an "as-available" LNG vaporisation service as a result of the removal of constraints from the NGR. This was posed as an example of how flexibility in the market would be promoted if the restrictions on contracting for LNG services were removed. However, Infratil submitted that even if a Market Participant were able to negotiate such a non-firm, as-available contract with APA, it would not be able to bid that capability into the DWGM because non-firm gas is only allowed to be bid in under very limited circumstances and LNG gas does not qualify. AEMO agrees with Infratil's observation that non-firm gas cannot be bid into the DWGM and has removed that part of the example from the justifications for the rule change in section 2(a) above. That is not to say that Market Participants and APA could not develop innovative LNG services that can be bid into the DWGM, however, such services will need to be consistent with NGR generally.

an on-going security measure.

 ² ESV also has generally applying powers of direction under the Gas Safety Act 1997 (Vic).
 ³ ESV has required that APA continue to be obliged under the NGR to keep the LNG Facility as full as possible as



5 Proposed Rule

5.1 Description of the Proposed Rule

The proposed rule changes are as follows:

Rule 278 Obligations of AEMO

The words "and managing the LNG reserve" have been removed.

Rule 279 Obligations of the LNG storage provider

Rule 279, sub rule (1) has been simplified but still maintains the objective of maintaining LNG stock at the highest level possible.

Rule 279, sub rule (3) has been altered to reflect the requirement of the LNG Storage Provider to provide certain tank level information to AEMO each day for monitoring and operational planning purposes.

Rule 280 Declared LNG supply agreement

The reference to the declared LNG supply agreement in rule 280 (1) has been removed. The declared LNG supply agreement is a commercial arrangement between APA and the LNG supplier and includes a confidentiality clause which prevents APA from disclosing certain details to AEMO. This change will reflect the contractual requirement.

Subrules (2) and (3) of rule 280 have been deleted as they breach confidentiality clauses in APA's declared LNG supply agreement. Subrule (4) has also been deleted as this is a specific intrusion into APA's commercial arrangements with the LNG supplier and the retailers. The commercial arrangements between APA and retailers ensure that APA is incentivised to have in place appropriate arrangements for the liquefaction of gas.

Rule 281 LNG storage capacity

Subrules (1), (3) and (4) of rule 281 have been deleted. Subrule (3) prevents APA from contracting storage to Non Market Participants and impedes APA's ability to enter into other commercial arrangements in relation to the LNG Facility. The removal of the Rule will not prevent AEMO from obtaining capacity for a reserve in the future if, at the relevant time, any capacity remains uncontracted. Subrule (4) states that a Market Participant must hold LNG storage capacity in order to use the LNG storage facility. It is considered unnecessary for this to be a rule.

Subrule (2) has been modified to remove reference to the amount of LNG held in the LNG reserve, as this will vary from time to time through agreement between AEMO and APA.

Subrule (5) has been modified by removing the words "and keep updated", as maintaining a register implies keeping it updated.

Rule 282 Transfers of LNG storage capacity

Rule 282 has been deleted. This section is overly prescriptive and an impediment to trade. A Market Participant should be able to transfer storage under commercial arrangements with another market participant. APA as LNG allocation agent has the responsibility to track and report storage and gas usage allocations for all participants associated with the LNG storage.



Rule 283 Liquefaction of gas

This section has been deleted to remove the overly prescriptive detail such that APA, the LNG supplier and the Market Participants can operate in a commercially optimal manner. APA is incentivised through its commercial arrangements with retailers to maintain the tank at a level to ensure high availability and reliability of the LNG injection service, and this requirement is already specified in Rule 279 (1).

Sub rules 283 (2) – (4) detail the LNG allocation rules for the LNG plant. APA has been unable to contract and sell additional LNG liquefaction services over and above existing contractual rights due to the prescriptive nature of these rules. The rules have been removed as they are an impediment to the commercial operation of the facility.

Rule 285 LNG Reserve

Rule 285 has been removed as it is considered unnecessary to detail how AEMO may use its LNG Reserve in the Rules. The LNG Reserve is intended for emergency purposes and it is considered that AEMO's ability to use it as such is sufficiently covered in Rule 343 – Intervention due to system security threat.

Rule 286 Provision of information

Rule 286 has been removed. The requirement for total LNG stock levels to be reported to AEMO has been transferred to Rule 279 (3). Consistent with the operation of all other injection points, APA and AEMO wish to transfer the remainder of this rule into the "LNG Storage Operation agreement".

The draft of the Rule is shown in Appendices 1 and 2 without and with changes marked respectively.

5.2 AEMO's Right to Submit this Proposal

AEMO is requesting that the AEMC make this proposed Rule in accordance with section 295(1) of the NGL. Under section 295(3) of the NGL, the AEMC may only consider making Rules regulating a Declared Wholesale Gas Market (DWGM) that have been requested by AEMO, or the Minister of an adoptive jurisdiction. As such, AEMO may request the AEMC to make a Rule regulating the DWGM.

5.3 Public Consultation

Under section 305 of the NGL, the AEMC may consider dispensing with some elements of the rule making process if a gas market regulatory body (which includes AEMO) has made a request for a Rule under section 295(1) and in the opinion of the AEMC, has adequately consulted with the public having regard to certain criteria set out in section 305(2)(a).

The public consultation process that AEMO has followed is set out below:

- AEMO has consulted extensively on the matters that are included in the proposed Rule by publishing the proposed Rule and justification for it on its website;
- stakeholders were given at least 20 business days to provide written comments to AEMO on the key issues addressed in the proposed Rule and were also given the



opportunity to raise any issues at the GWCF. Stakeholders' concerns were dealt with and appear in this proposal;

- the consultation involved industry members, industry representative bodies and stakeholders, with key consultation dates and documents published on AEMO's website and notified via AEMO Communications and AEMO's gas industry contacts databases; and
- the rule changes proposed in the consultation process are exactly as consulted in this proposal.

Section 4 of this proposal provides a summary of the consultations held at the GWCF and through its website consultation. Appendix 3 provides a more detailed summary of the issues raised and AEMO's responses.

6 How the proposed Rule contributes to the National Gas Objective (NGO)

Before the AEMC can make the a Rule change it must apply the rule making test set out in the NGL, which requires it to assess whether the proposed Rule will or is likely to contribute to the National Gas Objective (NGO). Section 23 of the NGL states the NGO is:

to promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas.

The proposed Rule contributes to the National Gas Objective by promoting more efficient operation of the LNG Facility in the long term interest of consumers of natural gas in respect of price, safety, reliability and security of supply of natural gas. Greater flexibility in the operation of the LNG facility (as opposed to concentrating solely on storage capacity as under the existing Rules) will offer increased opportunities to Market Participants to invest in innovative LNG services. The LNG Storage Provider will be able to offer different services, such as increased liquefaction or vaporisation rates and increased storage capacity. As an example, increased liquefaction rates lower the risk of LNG stock diminishing (see example in section 3.3 above). This should stimulate investment in plant that can deliver those services.

Improved flexibility can allow different ways of achieving reliability and security of LNG supply. AEMO considers that it is more efficient to allow the market to decide how to contract for and dispatch LNG with corresponding benefits for the supply of natural gas. Furthermore, the improved flexibility should result in a reduction in the transaction costs which should ultimately be reflected in lower LNG and natural gas prices than would otherwise be the case. AEMO also contends that the simplification of the rules should lead to a lessening of the administrative costs of complying with the existing prescriptive rules with similar effect.

7 Expected Benefits and Costs of the Proposed Rule

There is considered to be no direct financial impact from this change. However the removal of the very prescriptive nature of these particular rules will enable the LNG Storage Provider



to develop LNG services in response to customer requirements, increasing the overall efficiency of the facility as discussed in section 3.

There is the potential for transaction costs associated with LNG to be reduced. The very prescriptive nature of the existing rules means that the LNG storage provider has to work out in great detail how to structure its contracts. Removing the complexity in the rules may mean contract structures can be simplified, thus decreasing transaction costs.



Appendix 1 – Draft of the Proposed Rule

The proposed drafting of the rule is:

Subdivision 2 LNG Storage

278 Obligations of AEMO

AEMO is responsible for scheduling LNG injection bids.

279 Obligations of the LNG storage provider

- (1) The LNG storage provider must ensure that the LNG storage facility is utilised with the objective of maintaining LNG stock at the highest level possible.
- (2) The LNG storage provider must operate the LNG storage facility in accordance with the scheduling instructions issued by AEMO.
- (3) The LNG storage provider must advise AEMO of the total quantity of LNG stock held in the LNG storage facility at the end of each gas day and the total quantity of LNG stock held by Market Participants which is available to be bid in to the Declared Wholesale Gas Market at the end of each gas day.

280 Declared LNG supply agreement

- (1) The LNG storage provider must, subject to the terms and conditions of the declared LNG supply agreement, keep AEMO informed in a timely manner of all matters or circumstances relating to the operation of the LNG storage facility that may affect the ability of AEMO to schedule LNG injection offers or use the LNG reserve.
- (2) (Deleted)
- (3) (Deleted)
- (4) (Deleted)

281 LNG storage capacity

- (1) (Deleted)
- (2) Unless and until AEMO otherwise agrees, the LNG storage provider must make available an amount agreed with AEMO of LNG storage capacity for the operation of the LNG reserve.
- (3) (Deleted)
- (4) (Deleted)
- (5) The LNG storage provider must maintain a register of LNG storage capacity, which must include the following information:
 - (a) the identity of each holder of LNG storage capacity;



- (b) the amount of storage space to which each holder of LNG storage capacity is entitled; and
- (c) the quantity of LNG stock held on behalf of each holder of LNG storage capacity.

282 (Deleted)

283 (Deleted)

284 Vaporisation of LNG and LNG injection bids

- (1) Subject to subrule (2), AEMO must schedule LNG injection bids in accordance with the provisions of Division 2, Subdivision 2.
- (2) AEMO must call on LNG injection bids by issuing scheduling instructions directly to the LNG storage provider and, to avoid doubt, AEMO is not required to issue scheduling instructions to Market Participants in respect of their LNG injection bids.

285 (Deleted)

286 (Deleted)



Appendix 2

Draft of the Proposed Rule with changes marked

The proposed drafting of the rule is:

(Additional words underlined and highlighted in red. Deleted sections are struck through.)

Subdivision 2 LNG Storage

278 Obligations of AEMO

AEMO is responsible for scheduling LNG injection bids and managing the LNG reserve.

279 Obligations of the LNG storage provider

- (1) The LNG storage provider must ensure that, subject to the terms and conditions of this Part and the right of Market Participants who hold LNG storage capacity to make LNG injection bids, the LNG storage facility is utilised with the objective of maintaining LNG stock at the highest level possible.
- (2) The LNG storage provider must operate the LNG storage facility in accordance with the scheduling instructions issued by AEMO.
- (3) The LNG storage provider must advise AEMO of the total quantity of LNG stock held in the LNG storage facility at the end of each gas day and the total quantity of LNG stock held by Market Participants which is available to be bid in to the Declared Wholesale Gas Market at the end of each gas day, maintain a register of the holders of LNG storage capacity and register transfers of LNG storage capacity and LNG stock in accordance with rules 281 and 282.

280 Declared LNG supply agreement

- (1) The LNG storage provider must, subject to the terms and conditions of the declared LNG supply agreement, keep AEMO informed in a timely manner of all matters or circumstances relating to the declared LNG supply agreement or the operation of the LNG storage facility that may affect the ability of AEMO to schedule LNG injection offers or use the LNG reserve.
- (2) The LNG storage provider must notify AEMO on or before the twelfth day of each month of the following information relating to the operation of the declared LNG supply agreement:
 - (a) the minimum and maximum quantity of gas the LNG storage provider may order for liquefaction by the declared LNG supplier in the following month under the declared LNG supply agreement; and



- (b) if known, the declared LNG supplier's requirements for gas and LNG stock in the following month.
- (3) If any provision of this Part with which the LNG storage provider is bound to comply is inconsistent with any term of the declared LNG supply agreement, then the term of the declared LNG supply agreement will provail.
- (4) The LNG storage provider must not terminate or vary the declared LNG supply agreement without the consent of AEMO (whose consent must not be unreasonably withheld or delayed).

281 LNG storage capacity

- (1) AEMO must not do anything, or omit to do anything, that would adversely affect the declared LNG supplier's LNG storage entitlement under the declared LNG supply agreement.
- (2) Unless and until AEMO otherwise agrees, the LNG storage provider must make available 3,000 tonnes-an amount agreed with AEMO of LNG storage capacity for the operation of the LNG reserve-in accordance with rule 285.
- (3) If AEMO requests, any LNG storage capacity which is not required to be made available to the declared LNG supplier or is not allocated to Market Participants must be made available to AEMO and will comprise part of the LNG reserve.
- (4) A Market Participant must hold LNG storage capacity in order to use the LNG storage facility.
- (5) The LNG storage provider must maintain and keep updated a register of LNG storage capacity, which must include the following information:
 - (a) the identity of each holder of LNG storage capacity;
 - (b) the amount of storage space to which each holder of LNG storage capacity is entitled; and
 - (c) the quantity of LNG stock held on behalf of each holder of LNG storage capacity.

282 Transfers of LNG storage capacity and LNG stock

- (1) A Market Participant may at any time:
 - (a) transfer all or part of its LNG storage capacity; or
 - (b) transfer all or part of its LNG stock,

to another Market Participant, subject to and in accordance with this rule.

(2) A Market Participant may not transfer LNG storage capacity or LNG stock if as a result the transferor or the transferoe would have LNG stock in excess of the LNG storage capacity to which it is entitled.



- (3) A transfer of LNG storage capacity or LNG stock may only be expressed to take effect on the start of a gas day and an instrument of transfer purporting to take effect at some other time is invalid.
- (4) The LNG storage provider must not reject a transfer in respect of which the requirements of this rule are satisfied.
- (5) Where a Market Participant proposes to make an LNG storage transfer, both the transferor and transferoe must give notice of the proposed LNG storage transfer to the LNG storage provider, specifying:
 - (a) the identity of the transferor and the transferoe;
 - (b) the amount of the LNG storage capacity or LNG stock the subject of the transfer; and
 - (c) the gas day on the commencement of which the LNG storage transfer is to be effective.
- (6) A proposed LNG storage transfer must be notified to the LNG storage provider by the transferor and the transferee by no later than 2 hours before the gas day specified in the notice referred to in subrule (5)(c) starts.
- (7) The LNG storage provider must:
 - (a) register an LNG storage transfer which complies with this rule as soon as reasonably practicable after it has been received; and
 - (b) notify AEMO of an LNG storage transfer and the amount of the LNG storage capacity or LNG stock transferred by no later than 1 hour before the gas day specified in the notice referred to in subrule (5)(c) starts.
- (8) The amount of LNG storage capacity and LNG stock which a Market Participant holds is to be determined by the register of LNG storage capacity maintained by the LNG storage provider in accordance with rule 281(5). The LNG storage provider is not required to have regard to any LNG storage capacity or LNG stock which a Market Participant purports to hold other than LNG storage capacity or LNG stock in respect of which that Market Participant is the registered holder.
- (9) With effect from the commencement of the gas day on which a valid LNG storage transfer is expressed to take effect in accordance with subrule (5)(c) the LNG stock that is the subject of a valid LNG storage transfer is to be added to the transferee's LNG stock and deducted from the transferor's LNG stock.
- (10) If for any reason a Market Participant ceases to be entitled to any LNG storage capacity, the LNG storage provider must, as soon as reasonably practicable after it becomes aware of the cessation, register that fact. Any LNG storage transfer that is notified to the LNG storage provider is valid and capable of registration, notwithstanding that the transferor's entitlement to the LNG storage capacity that is the subject of the LNG storage transfer has ceased, unless and until the cessation has been registered.



283 Liquefaction of gas

- (1) Unless AEMO otherwise approves, the LNG storage provider must order, in respect of each month, the maximum quantity of gas which it is entitled to require the declared LNG supplier to liquefy for storage in that month under the terms of the declared LNG supply agreement.
- (2) The quantity of gas made available to the declared LNG supplier for liquefaction and storage in the LNG storage facility during each gas day as a result of an order made by the LNG storage previder pursuant to subrule (1) must be allocated to, and is deemed to have been made available by, AEMO or the Market Participants who hold LNG storage capacity in the following order of priority:
 - (a) first, such quantity of gas must be allocated to, and is deemed to have been made available by, AEMO as may be necessary to ensure that the LNG reserve is maintained at the maximum level and that there is sufficient LNG stock for use by the declared LNG supplier in accordance with the terms of the declared LNG supply agreement; and
 - (b) second, a proportion of the remaining quantity, if any, (after a quantity has been allocated to AEMO pursuant to paragraph (a)) must be allocated to, and is deemed to be made available by, each Market Participant who holds LNG storage capacity in accordance with the following formula:

Q = (QL x PAC)/TAC

where:

- Q is the Market Participant's allocation of the remaining quantity (if any) of gas made available to the declared LNG supplier for liquefaction and storage in a gas day;
- QL is the remaining quantity of gas (if any) made available to the declared LNG supplier for liquefaction and storage in that gas day;
- PAC is that Market Participant's available LNG capacity at the start of that gas day; and
- TAC is the sum of all Market Participants' available LNG capacity at the start of that gas day.
- (3) The LNG storage provider must determine the quantity of gas deemed to have been made available by AEMO and each Market Participant to the declared LNG supplier for liquofaction during each scheduling interval and notify AEMO of its determination as soon as reasonably practicable after the end of the relevant scheduling interval.
- (4) A quantity of gas deemed to have been made available by a Market Participant to the declared LNG supplier during a scheduling interval in accordance with this



rule must be taken into account for the purpose of calculating that Market Participant's actual imbalance in that scheduling interval.

284 Vaporisation of LNG and LNG injection bids

- (1) Subject to subrule (2), AEMO must schedule LNG injection bids in accordance with the provisions of Division 2, Subdivision 2.
- (2) AEMO must call on LNG injection bids by issuing scheduling instructions directly to the LNG storage provider and, to avoid doubt, AEMO is not required to issue scheduling instructions to Market Participants in respect of their LNG injection bids.

285 LNG reserve

- (1) AEMO may utilise the LNG reserve by requiring the LNG storage provider to vaporise LNG stock held by the LNG storage provider on its behalf at such times and in such quantities as AEMO may reasonably consider necessary or desirable to ensure the security of the declared transmission system and to satisfy AEMO's operational requirements.
- (2) The LNG storage provider must comply with all reasonable directions of AEMO relating to the utilisation of the LNG reserve, including any direction to vaporise LNG stock which comprises part of the LNG reserve.
- (3) Any gas vaporised for testing of the LNG facility and boil off gas is to be treated as having been taken from the LNG reserve and included in the linepack account.

286 Provision of information

- (1) The LNG storage provider and AEMO must establish and operate an information exchange system allowing the electronic transfer of information between the LNG storage provider and AEMO relating to the LNG storage facility.
- (2) AEMO and the LNG storage provider must negotiate in good faith with a view to reaching agreement on:
 - (a) the specifications and requirements for the information exchange system; and
 - (b) the proportions in which the cost of providing and maintaining the information exchange system will be shared between the LNG storage provider and AEMO; and
 - (c) an amendment proposed by either party to an earlier agreement under paragraph (a) or (b);

and, in default of agreement, either party may initiate the dispute resolution processes and, in that event, the matters in dispute between the parties will be resolved by agreement or determination reached in accordance with those processes.



- (3) The information exchange system referred to in subrule (1) must allow AEMO to have access to the following information as soon as reasonably practicable after the end of each gas day:
 - (a) the quantity of gas made available to the declared LNG supplier for liquefaction during each scheduling interval of the previous gas day; and
 - (b) the quantity of LNG stock held in the LNG storage facility at the end of the previous gas day, for use by the declared LNG supplier, AEMO and each Market Participant who holds LNG storage capacity (after taking account of any gas made available for liquefaction by AEMO and each Market Participant pursuant to subrule (2) and liquefied during that gas day and any LNG vaporised during that gas day as a result of any scheduling instructions or any other direction by AEMO); and
 - (c) the quantity of gas made available to the declared LNG supplier for use in its LNG plant and air separation, nitrogen liquefaction, storage and other facilities and returned to the declared transmission system each scheduling interval of the previous gas day; and
 - (d) the register of LNG storage capacity kept under rule 281(5); and
 - (e) such other information relating to the operation of the LNG storage facility as AEMO may reasonably require.
- (4) AEMO must, if requested by a Market Participant who holds LNG storage capacity, make available to that Market Participant the following information relating to that Market Participant (if and to the extent that the information is available to AEMO):
 - (a) the quantity of gas deemed to be made available by that Market Participant to the declared LNG supplier for liquefaction during each scheduling interval:
 - (b) the quantity of LNG stock held by the LNG storage provider on behalf of the Market Participant at the end of each gas day; and
 - (c) the quantity of LNG vaporised on behalf of the Market Participant during each scheduling interval.



Appendix 3

Detailed Responses to Issues Raised by GWFC and Public Consultation

published on AEMO's website. Relevant papers, minutes of subsequent discussions and submissions can be found by navigating the following Discussions at the GWCF and submissions to the consultation document posted to its website concerning this issue are documented and

GWCF Meeting 153, 20 Oct 2009 - Implementation of Simplified rules for LNG storage - 20 Oct 2009 GWCF Meeting 152, 22 Sept 2009 - Implementation of Simplified rules for LNG Storage

National Gas Rule Change Proposal for Liquefied Natural Gas (Dandenong LNG Storage Facility) GWCF Meeting 154, 17 Nov 2009 - Implementation of Simplified rules for LNG storage

A discussion at GWCF meeting 153 and public consultation raised a number of issues with the proposal. These are discussed below. Response Summary of concern ssue

GWCF

-	TBUeneray suggested that the rules should	This was agreed and returned to the delivery selection of the Delivery State of the Property o
ĸ;	maintain a requirement for LNG stock levels to be	levels are important as AEMO considers the risk to the security of the
	published and not rely on an operational agreement	DWGM is low provided there is high availability of LNG to the market.
	between AEMO and APA, to which other Market	Knowledge of stock levels allows this to be monitored. This is also a
	Participants are not party.	requirement of Energy Safe Victoria. Market Participants want greater
		assurance that these levels will continue to be published than an
		operational agreement that can be subject to negotiation, can provide.
2	AEMO raised the issue that rule 284(2) regarding	This was agreed and returned to the rules. There is no intention to
	LNG injection bids should not be deleted as this	change the way that scheduling instructions for LNG work.
	operational requirement is required for efficient and	
	responsive LNG use.	



lssue	Summary of concern	Response
m	After the meeting AEMO expressed concern that all reference to the LNG reserve had been removed. AEMO had expressed its intention to APA to reduce its LNG reserve holding to zero tonnes. AEMO wishes to retain the right to have an LNG reserve in the future if it is deemed necessary by AEMO.	Reference to the LNG reserve was restored to the rules, enabling AEMO to maintain its right for reserve capacity in the future.
4	AEMO also expressed concern that the requirement to maintain LNG stock levels at as high a level as possible had been removed	The requirement to maintain LNG stock levels at as high a level as possible was restored to Rule 279. This requirement is important to system security and market operation as when LNG stocks diminish, the LNG price usually increases, leading to high uplift payments being imposed on Market Participants.
Public Consultation	sultation	
<u>-</u> :	Origin generally supports the rule change proposal and believes that it should meet the NGO but raises a concern that "at this time there is uncertainty around what types of products will be made available if this proposed Rule change is accepted. Making information available about the descriptions and structures of these new products and services will be important." Origin expressed concern that the proposed changes may lead to APA shifting its focus from emergency management and system security to	Under the proposed Rule, individual Market Participants have the flexibility to define new LNG products by negotiation with APA provided that those are consistent with the NGR. These arrangements may cover storage, capacity, liquefaction capacity and potentially vaporisation capacity or combinations thereof. AEMO understands that the current vaporisation capacity and the current and historical liquefaction capacity (up to 1500 tonnes per month) must remain available to Market Participants in the longer term. Market Participants may be able to take on additional liquefaction given the removal of rules restrictions on APA.

tonnes per day over and above the approximately 50 tonnes per day for

the market, this should not present an issue.

National Gas Rule Change Proposal For Liquefied Natural Gas (Dandenong LNG Storage Facility)



lssue	Summary of concern	Response
	commercial incentives.	tonnes storage will remain available to the gas market. It should be noted
	As such, Origin recommends boundaries be set on	that if Market Participants in AEMO's reasonable opinion do not
	APA's activities to ensure that its commercial	collectively contract sufficient LNG capacity for the gas market for
	imperatives are not allowed to compromise its	emergency purposes, AEMO may reintroduce an LNG Security Reserve.
	obligation to contribute to system security.	AEMO notes that emergency management is not APA's primary obligation
		but contends that Market Participants have commercial incentives to ensure they have adequate I NG to manage their loads and market
		exposure. Both AEMO and Energy Safe Victoria (ESV) continue to
		monitor the usage, forecast use and availability of LNG and/or alternatives
		for emergency purposes and therefore have a clear and continuing role in
		ensuring ongoing security of gas supply.
		Fuel for heavy duty truck fleets may initially constitute demand for LNG
		services outside the DWGM (BOC excepted) The demand from this
		sector does not require any vaporisation capacity at all but does require
		liquefaction capacity and some storage. As this type of demand is
		relatively steady from week to week it has relatively small storage usage
		but relatively higher liquefaction rate compared to LNG for peak shaving.
		Given BOC's recent release of liquefaction capacity of approximately 100





Issue	Summary of concern	Response
N	Infratil raised the issue of how "as-available" vaporisation capability bid may be bid into the DWGM. Infratil notes "[i]f 'as-available vaporisation capacity' were to be contracted with APA, it is unclear how this will then be managed and scheduled as the current DWGM does not allow participants to bid as-available these services into the wholesale market."	Infratil raises a valid point and AEMO agrees that bids based on "asavailable" vaporisation capability is not permissible under the current rules. This confusion arose because of the wording in section 2(a) of the Consultation Paper where it was suggested that APA and Market Participants could contract as-available capability. There is no reason why APA and the Market Participant cannot reach such an agreement but this capability, if it is in fact non-firm, cannot be bid into the DWGM. AEMO included the statement as an example of the flexibility that could be available to Market Participants due to the rule change. However, Market Participants will need to ensure that any innovative use of LNG products negotiated with APA are in accordance with the DWGM rules. To avoid confusion, this example has now been removed from section 2(a) of this proposal.



Appendix 4

Background Information on the LNG Facility

Dandenong LNG Storage Facility

The LNG Facility has been operating for three decades primarily for peak shaving on days of high demand but also as a critical emergency supply. The facility comprises:

- An LNG storage tank with 12,000 tonnes capacity;
- vaporisation capacity of 180 tonnes/h for gas to be injected into the transmission system
- liquefaction capacity of up to 150 tonnes/day of which up to 1500 tonnes/month is currently available to market participants for Victorian wholesale gas market.

With a fully contracted capacity of 12,000 tonnes (or 660TJ), the LNG Facility provides peak shaving and security of supply services for the DTS. This facility injects gas into the DTS to meet peak winter demands, particularly when pressures drop around Melbourne in the evenings. It has been a critical supply in gas emergencies arising from gas supply shortfalls that have arisen due to rare but severe production or transmission outages such as at Longford in September 1998.

Up to 1998 LNG was the only alternative supply to Esso (Longford) and hence was absolutely critical to managing system security during emergencies while gas loads were curtailed. A 3000 tonnes LNG security reserve was held out of market form 1999 to 2007 by VENCorp for such emergencies in cases where Market Participants' LNG might have been depleted. This reserve level was been reduced in stages based on thorough risk analysis (2007) so that no reserve is currently held by AEMO.

Development of several alternative gas supplies (pipeline and production) from 1998 have greatly reduced reliance on LNG as an emergency supply but LNG still plays a critical role in peak shaving due to it location close and rapid response. The supply developments from 1998 are summarised Table 1. below and shows that up to 500TJ/d of alternative gas supplies to Esso (Longford) and LNG are now available to the DTS.

LNG remains a critical supply for peak shaving on several days per year though its use declined markedly in 2008 due to increase in system capacity and useable linepack when the Brooklyn Corio loop was commissioned.

The LNG also provides loading station for LNG fuelled heavy duty truck fleets and this usage is about to expand on release of BOC liquefaction capacity. At one stage LNG was regularly transported by tanker to gas loads in NSW.

It should be noted that the LNG Storage Facility, owned and operated by APA (Facilities Management) is not subject to regulation under the National Gas Code.



Table 1. Gas Supply Developments

	in day outply bevelopments		
Year	Supply	Capacity	Conditions
	Supply	(b/LT)	Conditions
1998	Vic-NSW Interconnect Culcairn	50 - 90	NSW and Vic Compressors available
1999	South West Pipeline from Iona	260	SW Pipeline pressurised near
1333	Journ West i Ipelline from Iona	200	maximum operating level.
			Storage not depleted, used natural
1999	Iona Underground Gas Storage	200	pressures to 6000kPa in first several
			years limiting supply to 150TJ/d
2003	Vic-Hub	120	EGP linepack or alt gas available eg
2003	VIC-HUD	120	Orbost plant
2005	Bass Gas (Lang Lang Plant)	60	67 rated capacity
2004	Iona Underground Gas Storage	260	Rerated for SWP 10,000 kPa MAOP
2005	Minerva Plant	120	Redirect gas from SEA Gas,
2005	Minerva Plant	120	competes with Otway and Minerva
2006	Casino Field	90	Processed by Iona UGS
2004	Iona Underground Gas Storage	330	Upgraded plant
2008	Otway Plant (Thylacine field)	200	Redirect gas from SEA Gas,
2008	Otway Plant (Thylacine field)	200	competes with Otway and Minerva
2008	Decolumn Lorente on ICo with March Directions	250	SW Pipeline pressurised near
2008	Brooklyn-Lara loop (South West Pipeline)	350	maximum operating level
2009	long LIGS plant expansion apparent	500+	SW Pipeline pressurised near
2009	Iona UGS plant expansion announced	300+	maximum operating level
2010	Total deliverable	460 to	alternative supplies to Esso, VicHub
2010	i otal deliverable	500*	and LNG

While new gas plants can produce well in excess of 500TJ/d, supply to the DTS is limited because Minerva, Iona UGS & Casino and the Otway Plant must compete for South West Pipeline capacity of 350TJ/d



Appendix 5

Representation at Gas Wholesale Consultative Forum (GWCF)

Objectives of GWCF

The following is an extract from "Gas Wholesale Consultative Forum (GWCF) Terms of Reference and Operational Procedure" found on AEMO's website.

Gas Wholesale Consultative Forum (GWCF) is a standing forum for providing effective and efficient consultation with stakeholders on development of the Victorian Gas Wholesale Market.

The objective of the GWCF is to provide:

- Effective consultation between AEMO and stakeholders for the development of changes to the Gas Wholesale Market Procedures (Victoria) (Procedures), National Gas Rules, systems and arrangements governing the wholesale market. Such consultation for procedures must be in accordance with the "Approved Process" (see Attachment A Transitional Approved Process) established under rule 135EC of the National Gas Rules (NGR). This includes advising AEMO and assisting AEMO in making a determination on the matters referred to in section 4 (Consultative Forum process) of the "Approved Process" and the completion of an Impact and Implementation Report (I&IR). Such consultation on rule must be in accordance with the rule change process established by the Australian Energy Market Commission (AEMC); and
- Effective ability for stakeholders to raise and address issues relating to the operation or functionality of the wholesale market.

The functions of the GWCF include:

- 1. The making and consideration of submissions in relation to development of the Victorian Gas Wholesale Market its Procedures and the NGR, to improve the market's efficiency and effectiveness in satisfying the National Gas Objective;
- Providing a forum for consultation and involvement of interested and affected parties for consideration of issues relating to the operation and design of the Victorian Gas Wholesale Market;
- 3. Providing feedback to AEMO on proposals made in relation to the Victorian Gas Wholesale Market;
- Advising the AEMO Board (or its delegate) on development of the Victorian Gas Wholesale Market, including making recommendations for changes to the design of the Gas Market, Procedures, systems, processes and other arrangements;
- 5. Advising AEMO of issues in relation to operation of the Victorian Gas Wholesale Market; and
- 6. Formally recording the positions and views of each participant organisation and other interested stakeholders on matters relating to the Victorian Gas Wholesale Market.



GWCF Participation

GWCF has been established as a standing committee to facilitate consultation on the operation of the Victorian Gas Wholesale Market with interested parties including registered participants, end user representatives and any members of the public. Additionally, it is established to provide continuity of stakeholder representation in development of the market and system processes.

The GWCF shall comprise:

- 1. A Chairperson nominated by AEMO;
- 2. A Secretary to AEMO nominated by the Chairperson;
- 3. An AEMO representative nominated by AEMO;
- 4. Any representative of a registered participant;
- 5. Any representatives of end-user groups; and/or
- 6. Any interested person of the public.

The purpose of participation is to ensure that the views of all registered participants for consideration of matters relating to the Victorian Gas Wholesale Market are recorded on the public record. Accordingly, the views put by members at meetings will be placed on the public record as the views of the organisations that they represent.

The GWCF is an open forum and all interested parties may attend the GWCF and participate in the meetings. Persons wishing to avail themselves of this opportunity must identify themselves prior to the meeting, via the method indicated on the AEMO website and at the commencement of the meeting, to the Secretary. The views put by interested parties at meetings will also be recorded on the public record.

Where an individual represents group of interested stakeholders, they:

- Must be nominated by a responsible person from the organisation(s) from whom the individuals represent. This nomination notice will be sent to the Secretary in writing or by email at least 5 business days prior to the meeting unless otherwise agreed by the Chairperson; and
- Should have sufficient expertise and authority to consider matters on behalf of the organisation(s) that they represent, and provide the formal views of those organisations for the public record.

Any individual nominated to represent a group of interested stakeholders will continue in that capacity until that individual resigns or a new individual is nominated by the organisation(s) that they represent. Unless indicated in the written notification to the Secretary, as specified above.

The Chairperson will formally recognise individuals at the commencement of each meeting and is responsible for the conduct of the meeting. During the meetings, the Chairperson will take into account the need to provide adequate consultation with all affected parties and stakeholders, and the requirements to satisfy the appropriate regulatory approval process for approval of a Procedure or Rule change.

Industry Representation and Decision Making

The GWCF has been established as a standing committee to facilitate consultation on the operation of the DWGM and is made up of representatives from across the gas industry. These include producers,



retailers, gas pipeline owners, market customers, consumer representatives and the Australian Energy Regulator (AER). Representatives include industry participants such as TRUEnergy, Origin Energy, AGL, Esso/BHP and Visy.

Additionally, it is established to provide continuity of stakeholder representation in development of the market and system processes.

At earlier stages of the GMCC (**Gas Market Consultative Committee**), the participants acted as a decision making committee where rule changes were made by majority vote of the Committee members. As noted above, on 1 May 2008, the GMCC's procedures were changed to become a forum where issues and concerns regarding the wholesale market and rule changes relating to the market were discussed and debated. Whether a proposal was taken forward depended on whether there was sufficient support for the proposal but more importantly whether the proposal represented an overall benefit to the operation of the market as a whole. This procedural alteration was taken forward to the GWCF. The change of name and terms of reference adopted on 1 July 2009 to reflect that that the nature of the group was now a public discussion forum rather than a committee convened for decision making.





Term or Abbreviation	Explanation
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
АРА	APA Group, the LNG storage provider
DWGM	The Victorian Declared Wholesale Gas Market
GMCC	Gas Market Consultative Committee
GWCF	Gas Wholesale Consultative Forum
LNG	Liquefied Natural Gas
MSOR	The Victorian Market and System Operations Rules
NGL	National Gas Law
NGO	The national gas objective as stated in section 23 of the NGL.
NGR	National Gas Rules