RULE CHANGE

Australian Energy Market Commission

CONSULTATION PAPER

National Gas Amendment (Matched allocation process in the STTM) Rule 2014

Rule Proponent

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For and on behalf of the Australian Energy Market Commission

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About the AEMC

The Council of Australian Governments, through its Ministerial Council on Energy (MCE), established the Australian Energy Market Commission (AEMC) in July 2005. The AEMC has two principal functions. We make and amend the national electricity and gas rules, and we conduct independent reviews of the energy markets for the MCE.

Contents

1 Introduction 1

2 Background 2

2.1 Unaccounted for gas 2

2.2 Risks and Costs associated with the Short Term Trading Market 3

2.3 Matched allocation process 5

2.4 Regulatory frameworks 7

2.5 Unaccounted for gas jurisdictional variations 9

3 Details of the rule change request 12

3.1 Jemena rule change request 12

3.2 Jemena's rationale 12

4 Assessment framework 14

5 Issues for consultation 16

5.1 The appropriate treatment of unaccounted for gas 16

5.2 Costs and risks to STTM participants and AEMO 17

5.3 Barriers to harmonising the treatment of unaccounted for gas 18

6 Lodging a Submission 20

6.1 Lodging a submission electronically 20

6.2 Lodging a submission by mail 20

Abbreviations 21

1 Introduction

Jemena Gas Networks has submitted a rule change request to the Australian Energy Market Commission in relation to the arrangements for the procurement of gas for the operation of the New South Wales Gas Network.[1]

The National Gas Rules currently provide a transitional arrangement which allows for any gas purchased by Jemena for operational reasons to be excluded from the Short Term Trading Market (STTM). This is permitted through a 'matched allocation' process which allows such gas to be excluded from STTM settlement even though the gas is transported through the pipeline system of the STTM.

This transitional arrangement was included in the rules at the commencement of the STTM and is due to expire on 30 June 2015. The rule change request seeks to amend the rules to convert the matched allocation process into a permanent arrangement.

If the proposed rule is made, Jemena would continue to have the option of either procuring operational gas prior to the entry point of the STTM or alternatively through the STTM. If the rule is not made, Jemena would be required to procure its operational gas through the STTM.

Jemena considers that procuring gas outside the STTM enables it to avoid the costs and risks associated with participating in the STTM such as fees and deviation pricing risks. Therefore Jemena considers that the proposed rule is in the long term interests of customers as the benefits of avoiding such costs and risks are passed through to customers in the form of lower network tariffs.

This consultation paper has been prepared to facilitate public consultation and to seek stakeholder submissions on the rule change request. It should be read in conjunction with Jemena's rule change request, which is available on the AEMC's website.

This consultation paper:

- sets out a summary of, and a background to, Jemena's rule change request;
- sets out the AEMC's proposed assessment framework;
- identifies a number of questions and issues to facilitate consultation on this rule change request; and
- outlines the process for making submissions.

Submissions on this consultation paper are due by 29 January 2015.

1 The NSW Gas Network consists of the NSW Distribution System, the Wilton-Newcastle trunk line, the Wilton-Wollongong trunk line and the Central West Distribution System.

2 Background

On 15 September 2014, Jemena Gas Networks NSW Ltd (Jemena) submitted this rule change request. The rule change request relates to the ability of Jemena to purchase gas, for pipeline operational reasons, outside of the Sydney STTM hub. The main reason why Jemena purchases such gas is to account for any gas which is lost within the NSW Gas Network while in its custody. Such gas is referred to as unaccounted for gas which Jemena is required to replace under the terms of its Access Arrangement.[2]

To provide context for this rule change request, this chapter briefly outlines background information detailing:

- unaccounted for gas;
- the risks and costs associated with participating in the STTM;
- how the matched allocation process works; and
- the current arrangements for unaccounted for gas.

2.1 Unaccounted for gas

Unaccounted for gas refers to the gas supplied into the gas network that is unaccounted for in delivery from the network. It is calculated as the difference between the measured quantity of gas entering the network system (receipts) and metered gas deliveries (withdrawals).[3]

There are a range of factors that may contribute to unaccounted for gas, including:[4]

- metering uncertainty in both receipt and delivery meters;
- degradation of meter accuracy;
- leakage;
- theft; and
- unmeasured gas used for operational purposes.

2 While Jemena may also need to purchase gas for other operational reasons, for the purpose of this consultation paper we will refer to the matched allocation process being applied for procuring unaccounted for gas. Jemena's Access Arrangement is regulated by the Australian Energy Regulator.

3 See Jemena Gas Networks (NSW) Ltd, *2015-2020 Access Arrangement Information*, Appendix 7.5, Unaccounted for gas methodology and justification, page 1.

4 See Jemena Gas Networks (NSW) Ltd, *2015-2020 Access Arrangement Information*, Appendix 7.5, Unaccounted for gas methodology and justification, page 1.

According to Jemena, since 1996, the levels of unaccounted for gas in the NSW Gas Network have varied between 1.9 and 2.7 per cent of receipts in a year.[5]

2.2 Risks and Costs associated with the Short Term Trading Market

Under the rule change request, Jemena would continue to be exempt from purchasing unaccounted for gas through the STTM. Jemena's reasons for seeking this exemption are:

- that it is unable to efficiently manage the risks of participating in the STTM given the difficulties in forecasting unaccounted for gas volumes on a daily basis; and
- any costs and risks they may accrue in purchasing gas through the STTM will be recovered from customers.

This section sets the costs and risks associated with participating in the STTM which Jemena is seeking to avoid. These include participation fees, prudential requirements and deviation pricing.

If Jemena were to procure gas through the STTM, it would be subject to a range of participation fees including:

- *Activity fee:* This fee is based on the actual quantity of gas withdrawn from the STTM hub per day by a STTM shipper or STTM user, and is calculated on a $/GJ basis.[6]
- *Fixed fee:* This is a flat rate that is charged per day to all STTM users and STTM shippers.[7]
- *Initial registration fee:* This is a set, one-off fee, charged to each new gas market participant.[8]
- *Participant Compensation Fund:* This is a flat rate ($/GJ) for each GJ of gas withdrawn from the STTM.[9]

Subdivision 3 of the National Gas Rules (NGR or rules) sets out the prudential requirements for all STTM participants. The prudential requirements include security

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5 See Jemena Gas Networks (NSW) Ltd, *2015-2020 Access Arrangement Information*, Appendix 7.5, Unaccounted for gas methodology and justification, page 2.

6 The current rate is $0.08203/GJ, as outlined in the Australian Energy Market Operator's *Gas Market Fee Schedule for 2014-15*.

7 The current rate is $30, as outlined in the Australian Energy Market Operator's *Gas Market Fee Schedule for 2014-15*.

8 Jemena would not be subject to this fee if it contracted with a STTM shipper to procure gas for its operational needs on its behalf.

9 The Australian Energy Market Operator's *Gas Market Fee Schedule for 2014-15* does not include a fee for the Participant Compensation Fund.

deposits, guarantees or bank deposits and credit ratings. Jemena would also incur additional costs in continually monitoring its exposure to the STTM.

Risks associated with deviation pricing

Participation in the STTM may also attract penalties in the form of deviation pricing.

Deviation pricing results from differences between a STTM participant's nominated market schedule and the actual quantity of gas shipped to, or withdrawn from, the STTM. These market parameters are designed to act as an incentive for STTM participants to accurately forecast the quantity of gas they expect to either supply to, or withdraw from, the STTM hub each day.

A deviation quantity can be either "long" or "short". For a STTM participant who withdraws gas from the hub, a long deviation means that it consumed less gas at the hub than scheduled. A short deviation means the actual quantity of gas it consumed was more than its scheduled quantity.

If a STTM participant has a short deviation, it must pay a "deviation charge" to Australian Energy Market Operator (AEMO). This deviation charge is effectively a payment by the participant to cover the purchase of additional gas that was required to cover its deviation quantity.

If a STTM participant has a long deviation, it will be paid a "deviation payment" by AEMO. This deviation payment is effectively a payment to the participant for selling its excess gas back to the market.

The magnitude of the deviation charge or payment depends on a number of factors. Generally, deviation payments are set at a relatively low price, which is less attractive than if the STTM participant sold that gas in the STTM, where as deviation charges are set at a high price to penalise the STTM participant for withdrawing more gas than scheduled. Each deviation payment and charge reflect the impact the deviation had on the STTM, and will vary for each participant. Each deviation is assessed by the impact it had on the ex-ante market price, on the ex-post imbalance price, and if contingency gas was called, on the contingency gas price.[10]

Subjecting STTM participants to deviation charges and payments recognises that there are costs associated with physically balancing the pipeline and absorbing the daily fluctuations that result from deviations.[11]

A STTM participant can manage some of the risks associated with deviation pricing by also registering as a Market Operator Service (MOS) provider. For example, if net

10 See Australian Energy Market Operator, *Overview on the Short Term Trading Market for Natural Gas*, 14 December 2011, version 4.2, page 12. For details on how deviations payments and charges are calculated see section 10.8 of the STTM Procedures.

11 The costs of physically balancing the pipeline include the provision of MOS that are used to balance the pipeline. MOS are provided by pipeline operators, shippers and trading right holders (such as end-users) that have the capacity to either increase or decrease gas supply to a STTM hub, depending on daily fluctuations.

deviations on a pipeline are short, AEMO would be required to purchase "increase MOS" from a MOS provider. If this same MOS provider is also a STTM participant that is also subject to deviation charges, then the financial impact of deviation charges can be reduced.

The Australian Energy Market Commission (AEMC or Commission) has made rule changes to further improve STTM participants' ability to manage these risks and enhance the efficiency of the STTM by:

(a) reducing the financial risks of participation and improving price signals and certainty regarding the costs to participants of deviating from their daily gas market schedules by strengthening the principles underpinning the deviation pricing framework;[12]

(b) expanding the range of STTM participants that can provide MOS, thereby increasing MOS liquidity and improving hedging opportunities for a broader range of participants;[13] and

(c) explicitly including a "causer pays" principle in the deviation pricing framework as a basis for allocating any settlement surplus and shortfall arising from STTM participants who caused the cost in the first instance.[14]

Jemena considers that it has a limited ability to manage the differences between its nominated market schedule and the actual quantity of gas it withdraws given the characteristics of unaccounted for gas. Therefore it argues it would not promote efficiency to subject it to the risk of deviation pricing. This issue is discussed further in section 5.1.

2.3 Matched allocation process

The National Gas Rules (NGR) contains transitional arrangements that exempt defined parties from procuring gas through the STTM. The rules currently permit the following two such exemptions to apply in limited circumstances:

1. Jemena for the purposes of procuring unaccounted for gas for the NSW Gas Network; and

2. BlueScope Steel in relation to gas purchased for feedback flow control at the Port Kembla Steelworks.[15]

12 See Australian Energy Market Commission, *STTM deviations and the settlement surplus and shortfall Rule 2013*, Final Determination, 20 June 2013.

13 See Australian Energy Market Commission, *Market Operator Service - Timing and Eligibility Rule 2013*, Final Determination, 23 May 2013

14 See Australian Energy Market Commission, *STTM Settlement Surplus and Shortfall Rule 2014*, Final Determination, 3 April 2014.

The exemptions enable these entities to procure gas through a matched allocation process. These quantities of gas are excluded from STTM settlements and are therefore not subject to STTM pricing at the Sydney hub.

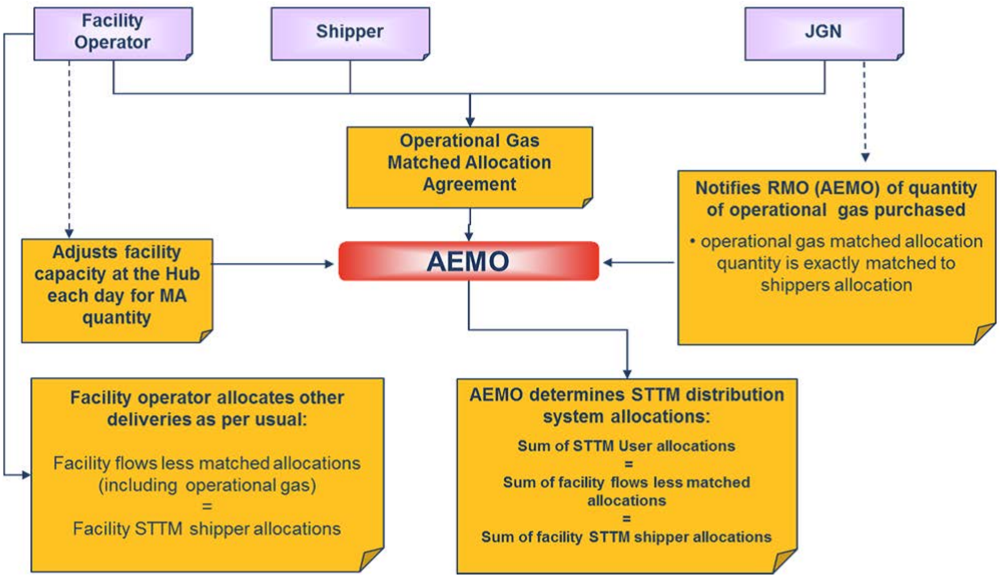
Clause 26 of the NGR allows Jemena and BlueScope Steel to enter into a matched allocation agreement with a shipper for the provision of a matched allocation quantity of gas. These arrangements must be registered with AEMO.

Under a matched allocation agreement, a shipper agrees to provide a matched allocation quantity of gas prior to the entry point of the STTM. The matched allocation quantity of gas delivered to the STTM hub each day must match the matched allocation quantity of gas withdrawn from the hub that same gas day. Effectively, this means that the matched allocation quantity that is withdrawn from the hub is also its deemed matched allocation quantity nomination to the shipper. Therefore there is no risk of deviations involved with forecasting gas requirements under the matched allocation process.

The matched allocation quantity of gas delivered under this arrangement is excluded from settlement in the STTM. In order to exclude matched allocation quantity from STTM settlements, the facility operator (APA Group) provides AEMO with pipeline allocation information that does not include the matched allocation quantity. Similarly, AEMO excludes matched allocation quantities from distribution system allocations for the STTM.

Figure 2.1 illustrates the matched allocation process and details how matched allocation quantities are managed outside the STTM settlement process.

Figure 2.1 Matched allocation process in the STTM and retail markets[16]



15 Specifically, the feedback flow control process means that quantities of gas are automatically injected from the Eastern Gas Pipeline into the Port Kembla local area distribution network. These injections are designed to prevent supply disruptions to other customers on the network.

16 Source: Jemena rule change request. Diagram, AEMO, Matched Allocations, September 2009

Clauses in the NGR relating to the matched allocation process are transitional. Registered matched allocation agreements relating to the provision of matched allocation quantities for Jemena are due to expire on 30 June 2015 (see clause 26(9)(a) of Schedule 1).

BlueScope Steel Matched Allocation

The registered matched allocation agreements relating to BlueScope Steel will expire on 31 August 2015. The AEMC understands that the exemption for BlueScope Steel to procure gas outside to the STTM hub was included to accommodate existing contracts at the time of transitioning to the STTM rules.

The rule change request does not propose maintaining the matched allocation arrangements for BlueScope Steel. It is Jemena's understanding that BlueScope Steel did not seek an extension to its matched allocation process.[17]

2.4 Regulatory frameworks

National Gas Rules

The NGR do not refer to the treatment of unaccounted for gas in any STTM hubs. Rather, the details of unaccounted for gas arrangements are found in jurisdictional Retail Market Procedures and a distributor’s Access Arrangement.

The NGR do, however, provide guidance on matched allocation agreements (clause 26 of Schedule 1) and matched allocation quantities (clause 13 of Schedule 1), including the roles and responsibilities of each party subject to a matched allocation agreement.

Retail Market Procedures

The jurisdictional Retail Market Procedures sets out the operational arrangements regarding the procurement and settlement of unaccounted for gas.

Retail Market Procedures provide further detail regarding the treatment of unaccounted for gas, including how it is allocated and verified in STTM hubs. The Retail Market Procedures for NSW and ACT further supplement matched allocation agreement provisions in the NGR by providing further guidance on notification requirements and calculating unaccounted for gas for the purpose of excluding it from STTM settlements.

The AEMC understands that the treatment of unaccounted for gas varies across jurisdictions, reflecting that existing arrangements were used to transition to STTM arrangements. Further detail on jurisdictional variations is outlined in Table 2.1.

17 BlueScope Steel was required to notify AEMO of its intention to extend a registered matched allocation agreement by 31 August 2014, and has not done so.

Jemena's Access Arrangement

The Access Arrangement governs Jemena's unaccounted for gas arrangements in a number of different ways.

First, as noted earlier the Access Arrangement places an obligation on Jemena to replace any gas that is lost in the NSW Gas Network while in its custody or control. In addition, it also requires that Jemena replace unaccounted for gas using one or a combination of the following methods:

- utilising a competitive tender for a supply of unaccounted for gas, as determined by Jemena acting reasonably; and/or
- sourcing its unaccounted for gas needs directly from the STTM.

Second, the Access Arrangement sets out how Jemena can recover the costs of procuring unaccounted for gas from its customer base through its network tariffs. A key parameter used to determine this amount is the defined unaccounted for gas benchmark. The unaccounted for gas benchmark represents an efficient range of unaccounted for gas for Jemena's distribution system and takes into consideration various characteristics of its pipeline, including pipeline material and specific maintenance and repair history.[18]

The unaccounted for gas benchmark for Jemena for the current regulatory period is set at 2.34 per cent of the total measured quantity of gas entering the network system (receipts) for a year. If the actual unaccounted for gas rate is below (above) Jemena's target unaccounted for gas rate, Jemena over (under) recovers its actual unaccounted for gas costs. This provides an incentive on Jemena to achieve actual unaccounted for gas levels which are less than the benchmark unaccounted for gas over a year.

If actual receipts or the cost of purchasing unaccounted for gas differs from the approved forecast, Jemena is compensated through the Tariff Variation Mechanism. Hence the volume of total receipts and the wholesale price of gas are matters considered to be outside Jemena's control.

The current Access Arrangement governing these arrangements is due to expire on 30 June 2015. In its draft decision on Jemena's Access Arrangement for the 2015-2020 regulatory period, the Australian Energy Regulator (AER) has accepted Jemena's proposed total unaccounted for gas rate of 2.24 per cent of total receipts.[19]

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18 The unaccounted for gas benchmark is typically expressed as a percentage of total gas receipts for a distribution system. Depending on the condition and materials used for the distribution system, the unaccounted for gas benchmark can vary from 0.5 per cent (AGNL Queensland) to 4.03 per cent (Multinet) across jurisdictions. See Jemena Gas Networks (NSW) Ltd, *2015-2020 Access Arrangement Information*, Appendix 7.5, Unaccounted for gas methodology and justification, page 5.

19 Jemena has actually proposed separate benchmark leakage rate for its customer groups - one benchmark for its non-daily metered customers (residential and small commercial) and another for its daily metered customers (larger, industrial customers). In its draft determination, the AER accepted having separate benchmarks. The 2.24 per cent benchmark rate represents the average

The AER is expected to make the final decision on Jemena's Access Arrangement by May 2015.

2.5 Unaccounted for gas jurisdictional variations

Table 2.1 outlines the different treatment of unaccounted for gas in each STTM, as well as a brief outline for comparison, of the Victorian arrangements in the Declared Wholesale Gas Market (DWGM).

At a high level, the arrangements for unaccounted for gas in the Adelaide and Brisbane STTM hubs are reasonably similar whereby distributors enter into commercial contractual arrangements with shippers for unaccounted for gas. In these STTM hubs, unaccounted for gas is procured through the STTM.[20] The DWGM represents a divergence from arrangements in the Adelaide, Brisbane and Sydney hubs, as the retailer is responsible for the procurement and delivery of unaccounted for gas.

rate based upon forecast volumes. See Australian Energy Regulator, *Draft Decision, Jemena Gas Networks (NSW) Ltd, Access arrangement 2015-202*, Attachment 7 - Operating Expenditure, pp 25- 28.

20 Differences in unaccounted for gas treatment emerge in the process for settling the difference between the volumes of unaccounted for gas contracted and withdrawn for the STTM hub. This level of detail is not outlined in the table below.

Table 2.1 Jurisdictional arrangements for unaccounted for gas

Issue	Adelaide	Sydney	Brisbane	Victoria (Declared Wholesale Gas Market)
Who is responsible for providing unaccounted for gas	The distributor, AGNL, is responsible for providing unaccounted for gas. AGNL procures unaccounted for gas from a shipper through a competitive tendering process.	The distributor, Jemena is responsible for providing unaccounted for gas. Jemena procures unaccounted for gas from a shipper through a competitive tendering process. Unaccounted for gas is then supplied to Jemena using the matched allocation process and is not subject to STTM pricing.	Distributor enters into commercial arrangements with the host retailer to cover the unaccounted for gas needs on its behalf.	Retailers responsible for providing unaccounted for gas equal to the unaccounted for gas benchmark. Host retailers provide balance of unaccounted for gas requirements, typically equivalent to unaccounted for gas amount.
Is there a definition for unaccounted for gas	Defined in the South Australian Retail Market Procedures.	Defined in the NSW and ACT Retail Market Procedures.	No existing processes or systems outlined for unaccounted for gas in the Queensland Retail Market Procedures.	Retail Market Procedures (Victoria) and Wholesale Market Distribution Unaccounted for Gas Procedures (Victoria) detail process for procurement and delivery of unaccounted for gas.
Role of Access Arrangement	Provide high level obligation to provide unaccounted for gas. AGNL is allowed an annual lump sum for the recovery of unaccounted for gas costs. This amount is recovered from customers through its tariffs.	Require Jemena to purchase unaccounted for gas through competitive tendering process. Jemena also has the option to source unaccounted for gas from the STTM. Access Arrangement provides fixed unaccounted for gas benchmark of 2.4 per cent and includes cost pass through mechanism.	Provide high level obligation to provide unaccounted for gas.	Regulator determines unaccounted for gas benchmark to apply to the distribution network. The actual amount of unaccounted for gas is compared with the benchmark, and a payment is made to or by the distributor to the various retailers.

Australian Gas Networks Ltd (AGNL), formerly Envestra, operates distribution pipelines in the Adelaide and Brisbane STTM hubs, as well as the Victorian DWGM. The AEMC understands that AGNL is considering lodging a proposal to amend the Retail Market Procedures for South Australia and Queensland to align their unaccounted for gas arrangements more closely to those in Victoria's DWGM. AGNL has raised this suggestion through AEMO's Gas Retail Forum Committee.

AGNL considers that there are a number of benefits in requiring retailers to be responsible for the physical and financial procurement of unaccounted for gas. Currently AGNL sources its unaccounted for gas requirements via a contract with a retailer, who sources the unaccounted for gas from the STTM. Some of these arguments are similar to Jemena's rationale for this rule change request and include:

- Retailers are already active in the STTM, and procure gas as part of their normal business arrangements. They are therefore better placed than distributors to manage the risks associated with participating in the STTM, especially deviation pricing.

- Unaccounted for gas requirements are only a small proportion of the total volume of gas retailer’s trade in the STTM. Economies of scale could therefore be achieved it retailers procure unaccounted for gas. This contributes to a lower unit cost for unaccounted for gas.

- Distributors incur costs by having to undertake separate tender processes for procuring unaccounted for gas on a periodic basis.

The AEMC understands that AGNL intend to present this proposal to the Gas Retail Forum Committee later this year for their consideration. Consultation on this matter will need to be finalised before AGNL submits its Access Arrangement proposal to the AER in July 2015.

3 Details of the rule change request

3.1 Jemena rule change request

This rule change request relates to transitional arrangements set out in clause 26 and clause 27 of Schedule 1 of the NGR.[21] The transitional arrangements allow Jemena to enter into a matched allocation agreement for the procurement and delivery of its unaccounted for gas requirements for its distribution system. The matched allocation agreement is due to expiry on 30 June 2015.

In its rule change request, Jemena proposes converting matched allocation provisions into permanent rules by moving them into Part 20 of the NGR.
The relevant provisions are:

- clauses 26(1)(a), 26(2)(a) and (d), 26(3)(a-b), (26(4), 26(5), 26(6), 26(8) and 26(9)(a);
- clauses 27(1-5); and
- the definition of Jemena, 'matched allocation quantity' and 'registered matched allocation agreement' in definitions section of Schedule 1 (clause 13).

3.2 Jemena's rationale

Jemena puts forward two arguments in support of its rule change request. The first argument relates to the potential cost savings that can be passed onto customers by allowing the continuation of the matched allocation process. The second argument relates to STTM incentive arrangements and the limited ability of Jemena to respond to these in the procurement of unaccounted for gas.

Higher unaccounted for gas costs

If the rule is not made, and the transitional arrangements are allowed to expire, Jemena would be required to procure unaccounted for gas through the Sydney STTM hub. Jemena considers that procuring unaccounted for gas through the Sydney STTM hub will result in it having to pay a higher price for unaccounted for gas than it currently does under the matched allocation process. Increased costs would result from:

- STTM participation fees, which are currently recovered by AEMO through an activity fee ($/GJ withdrawn) and a fixed fee ($/day per hub per ABN). Jemena estimates that these fees would equate to an additional impost on network users of $0.90 – 0.96 million over a five year period. This equates to around 0.04 per

21 Jemena's rule change request is available on the AEMC website. See Jemena Gas Networks (NSW) Ltd, Rule change request - National gas rules, Matched allocation process, address: http://www.aemc.gov.au/getattachment/af1c221a-9798-43f0-b08f-ac093c7dccee/Rule-change-request.aspx

cent of the AER's draft determination on Jemena's allowed revenue for 2015 to 2020.[22]

- Any costs associated with meeting AEMO’s prudential requirements for the STTM.
- The risk of STTM penalties relating to deviations occurring when actual unaccounted for gas requirements on a particular day deviate from the nominated market schedule.

Incentives and the efficient operation of the STTM

Jemena also states that unaccounted for gas is distinct from other types of gas bought and sold in the STTM, and that this should be taken into account when considering the rule change request. Specifically, Jemena argues that unaccounted for gas is used for the safe and reliable operation of the distribution pipeline and is not responsive to changes in demand or incentives under the deviation pricing framework.

Jemena states that for this reason, it is not in a position to respond to daily price signals in the market in the same way as other STTM participants. For example, Jemena notes that it would not be able to curtail demand in response to deviation pricing, as this would place the integrity of the distribution pipeline at risk. Therefore Jemena states that purchasing unaccounted for gas through the STTM will not contribute to any broader allocative efficiency benefits.

22 See Australian Energy Regulator, *Overview, Draft Decision: Jemena Gas Networks (NSW) Ltd access arrangement 2015-2020*.

4 Assessment framework

The AEMC’s assessment of this rule change request must consider whether the proposed rule promotes the National Gas Objective (NGO) as set out under section 23 of the National Gas Law (NGL), which is to:

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

The relevant aspects of the NGO to be considered in the context of this rule change are the efficient use of natural gas services plus the reliability and security of supply of natural gas. In assessing the rule change request against the NGO, the AEMC will consider the long term costs and benefits of adopting the proposed rule compared to the counterfactual position of not making the proposed rule.

According to Jemena, the primary benefit of the proposed rule change is that the cost and risks of procuring unaccounted for gas will be lower than what it would otherwise be if Jemena had to purchase gas through the STTM. Under the terms of Jemena's Access Arrangement, the benefit of reducing the costs of unaccounted for gas would be passed through via lower network tariffs.

In assessing this rule change, the AEMC will therefore consider whether this potential benefit to customers on the NSW Gas Network is offset by any negative impacts on the efficiency of the STTM or other STTM participants.

To determine whether the proposed rule, if made, is likely to promote the NGO, the following matters may be considered as part of the assessment:

- **Efficient allocation of the risks associated with deviation pricing**

  An appropriate allocation of risk is achieved when that risk is borne by the party that has the greatest control over that risk, is best able to avoid or minimise the risk, and can thus minimise the resulting costs of the risk. This generally leads to an efficient outcome.

  Efficient decision making can be supported by a range of incentives in the rules. The incentives should reflect the costs of undertaking activities that may lead to inefficient market outcomes. In the context of this rule change request, the rules for the STTM currently provide arrangements to facilitate efficient decision making with respect to the allocation of risk caused by deviation quantities. These arrangements, which are based on the causer pays principle, encourage participants to accurately nominate their daily gas volumes in order to minimise the costs of balancing the pipeline systems.

Jemena argues that efficiency benefits are unlikely to arise if they are subjected to such incentives, given the characteristics of unaccounted for gas and the need to maintain the integrity of the NSW Gas Network.

- **Efficient Utilisation of the NSW Gas Network**

  Jemena claims that if the proposed rule is not made, then it will be required to pay a higher price for unaccounted for gas which would feed through in higher network tariffs. This may have a negative impact on the efficient utilisation of the network and natural gas services, more generally, because network users could respond to the higher tariffs by reducing their demand for gas. Over time any reduced utilisation of the network could give rise to even higher network tariffs as the fixed costs of operating the network will be recovered from a smaller customer base.

- **The benefit from harmonising regulatory frameworks**

  Regulatory frameworks that are consistent across markets may promote efficient outcomes. A business that operates across numerous markets and is subject to various regulatory frameworks for undertaking the same activity faces higher administrative costs. Businesses can also be impeded from achieving economies of scale where regulatory frameworks are inconsistent.

  The costs associated with multiple and inconsistent regulatory frameworks can impact on decision making and therefore the efficient operation of the market. Therefore there could be situations where harmonising regulatory frameworks will promote the efficient operation of the market.

  As discussed in section 2.5 of this paper, the arrangements for the procurement of unaccounted for gas differ across the STTM hubs. While harmonisation of these arrangements is out of scope for this rule change, the assessment will consider whether making the proposed rule would impede alternative approaches to the treatment of unaccounted for gas. This may also include some assessment of whether making the proposed rule would impede any attempt to harmonise these arrangements.

This assessment framework may be reviewed and amended after considering stakeholder submissions on this matter, and with further development of the AEMC's own analysis of this rule change. The AEMC welcomes comments and suggestions relating to the proposed assessment framework.

5 Issues for consultation

Taking into consideration the assessment framework, a number of issues that are relevant to this rule change request have been identified for consultation. Stakeholders are invited to comment on these issues as well as any other aspect of the rule change request or this paper.

5.1 The appropriate treatment of unaccounted for gas

Incentive arrangements under the STTM

If the proposed rule is not made, Jemena would be subject to deviation pricing if its daily volume of gas withdrawn for operational purposes is different from the volume Jemena nominated in advance. Therefore a key issue for this rule change request is whether it is efficient for the procurement of unaccounted for gas to be subject to the risk of deviation pricing.

As noted in section 2.1, there are a range of factors that contribute to gas being lost in the NSW Gas Network, including leakage, metering uncertainty and degradation, and theft. While Jemena can reasonably forecast its likely range for unaccounted for gas withdrawals on an annual basis, forecasting daily unaccounted for gas requirements may be more challenging. This is because on a daily basis, there may be delays in obtaining information regarding the state of the distribution pipelines with respect to damage, metering, leakage and theft issues. Any delays in obtaining this type of information may affect the accuracy of daily unaccounted for gas forecasts.

In addition Jemena argues that if it is required to procure gas through the STTM, they will be limited in their ability to respond to the incentives under the deviation pricing arrangements. This is because to do so could place the safety, reliability and integrity of the network at risk. Therefore Jemena considers that there would not be any efficiency benefits from subjecting unaccounted for gas to daily deviation pricing.

If the proposed rule is not made, Jemena would procure unaccounted for gas either through becoming a STTM shipper itself or alternatively contracting with a STTM participant for delivery to the Sydney STTM hub. It is more likely that Jemena would choose to enter into a commercial contract with a STTM shipper, similar to the arrangement that distributors enter into in other STTM hubs. This is because ring fencing provisions in the National Gas Law could prevent Jemena from adequately managing the risks of participating in the STTM.[23]

23 See sections 137 and 138 of the National Gas Law. Under these provisions, Jemena would be unable to hedge against deviation charges by becoming a MOS provider in the STTM or selling gas in the STTM as a way of managing price variability.

Contracting with a STTM shipper to procure unaccounted for gas in the STTM on their behalf may not necessarily remove the risks of deviation pricing. The shipper is likely to include the costs of managing such risks in the gas price in the contract.[24]

As explained in section 2.5, distributors operating in other STTM hubs are required to procure their unaccounted for gas needs through the STTM. Stakeholder views are sought on whether it is appropriate for the procurement of unaccounted for gas for the NSW Gas Network to continue to be exempt from the risks of deviation pricing.

Question 1	**Given the difficulties in controlling the volume of unaccounted for gas on a daily basis and the need for unaccounted for gas to maintain the safe and reliable operation of the NSW Gas Network, is it appropriate for unaccounted for gas to be subject to the risks of deviation pricing in the STTM?**

5.2 Costs and risks to STTM participants and AEMO

As part of this rule change, the AEMC will consider whether there are any negative impacts either on the efficiency of the STTM or on other STTM participants if the matched allocation process were to continue. We appreciate stakeholder views on this matter.

This paper identifies the following two potential impacts if Jemena was required to procure unaccounted for gas through the STTM:

- An increase in liquidity at the Sydney STTM hub, which may benefit the efficient operation of the STTM by way of price discovery impacts.

- Lower STTM participation fees for other participants, as such fees reflect an individual participant's contribution to the total volume of gas traded in the STTM.

The magnitude of these impacts may not be material given the relatively small proportion of unaccounted for gas quantities withdrawn by Jemena, compared to the total volume of gas traded through the Sydney STTM hub.

24 A STTM shipper purchasing unaccounted for gas on behalf of a distributor may be able to take advantage of economies of scale that could otherwise minimise the impact of the nomination risk that Jemena faces. For example, the unaccounted for gas volumes that a STTM shipper procures on behalf of Jemena would represent a small proportion of the total volume of gas traded in the market by that STTM shipper. Therefore, any deviation from Jemena's nominated unaccounted for gas volume may be minimised depending on the shippers net deviations for that gas day.

We understand that Jemena, APA Group and AEMO have already set up the systems that are required to administer the matched allocated process. While these parties may experience some administration costs in managing the process, it is not expected that additional system related costs will be incurred if the rule is made.

If the rule is not made, then these systems may need to be removed. However the AEMC understands from AEMO that it would not be likely to incur material costs with removing the matched allocation process from its STTM settlements system.

Question 2	**Would requiring Jemena to procure unaccounted for gas through the STTM lead to improved efficiency of the STTM? Are there any benefits to STTM participants if unaccounted for gas for the NSW Gas Network is procured through the STTM?**

5.3 Barriers to harmonising the treatment of unaccounted for gas

As discussed in section 2.5, AGNL is considering lodging a proposal to amend the arrangements for the procurement of unaccounted for gas in both the Adelaide and Brisbane STTM hubs. One of AGNL's reasons is that retailers are better placed to manage unaccounted for gas risks than distributors, as trading in the STTM forms part of their regular business activity.[25]

AGNL's potential amendment raises a broader issue of which party, distributors or retailers, is better placed to manage the risks associated with procuring unaccounted for gas. This matter can only be addressed through amendments to the Retail Market Procedures and distributors' Access Arrangement and therefore is out of scope of this rule change request.[26]

Whilst this question is beyond the scope of the rule change request, the AEMC recognises that there may be potential consequences to making the matched allocation process permanent in the NGR. These include:

- Whether making the matched allocation process permanent in the NGR prevents any future endeavours to change the way in which unaccounted for gas is

25 Note that under the current arrangements, AGNL does not directly participate in the STTM. Rather, it sources its unaccounted for gas requirements via a contract with a shipper, who sources the unaccounted for gas from the STTM.

26 Changes to the procurement treatment of unaccounted for gas in the Retail Market Procedures may need to be reflected in any future Access Arrangement. For example, if retailers were required to procure unaccounted for gas from the STTM, the Access Arrangement may need to provide guidance as to the cost recovery process between retailers and distributors, as well as between distributors and customers.

procured for the NSW Gas Network, including changing the responsibility from distributors to retailers.

- Impede any potential harmonisation in the treatment of unaccounted for gas across jurisdictions.

Recognising the possibility of changes to the arrangements for the procurement of unaccounted for gas in other STTM hubs, there could be merit in considering an alternative option to Jemena's proposal. This would involve extending the transitional arrangements relating to the matched allocation process for a further five years. Under this option, the matched allocation process for Jemena would continue to 30 June 2020, the end of the next regulatory period.

This could allow sufficient time for Jemena and the industry to consider the issue raised by AGNL, while still providing certainty to the market in the immediate period. It would also provide adequate time to make any necessary changes to the Retail Market Procedures and inform Access Arrangement proposals and determinations for the 2020 -2025 regulatory period.

We seek views on whether making the matched allocation process permanent in the NGR is appropriate, given that it may act as an impediment to alternative approaches for the treatment of unaccounted for gas. We also seek views on whether the AEMC should consider the option of only extending the matched allocation process for a further five years for this rule change request.

Question 3	**Is there material benefit for retailers and distributors from harmonising the treatment of unaccounted for gas across STTM hubs? Will making the matched allocation process permanent in the NGR act as a barrier to harmonising the treatment of unaccounted for gas? If so, would only extending the matched allocation process for a further 5 years be appropriate?**

6 Lodging a Submission

The Commission has published a notice under section 303 of the NGL for this rule change request inviting written submission. Submissions are to be lodged online or by mail by Thursday 29 January 2015 in accordance with the following requirements.

Where practicable, submissions should be prepared in accordance with the Commission's Guidelines for making written submissions on rule change requests.[27] The Commission publishes all submissions on its website, subject to a claim of confidentiality.

All enquiries on this project should be addressed to Electra Papas on (02) 8296 7800.

6.1 Lodging a submission electronically

Electronic submissions must be lodged online via the Commission's website, www.aemc.gov.au, using the "lodge a submission" function and selecting the project reference code "GRC0030". The submission must be on letterhead (if submitted on behalf of an organisation), signed and dated.

Upon receipt of the electronic submission, the Commission will issue a confirmation email. If this confirmation email is not received within 3 business days, it is the submitter's responsibility to ensure the submission has been delivered successfully.

6.2 Lodging a submission by mail

The submission must be on letterhead (if submitted on behalf of an organisation), signed and dated. The submission should be sent by mail to:

Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

Or by Fax to (02) 8296 7899.

The envelope must be clearly marked with the project reference code: GRC0030.

Except in circumstances where the submission has been received electronically, upon receipt of the hardcopy submission the Commission will issue a confirmation letter.

If this confirmation letter is not received within 3 business days, it is the submitter's responsibility to ensure successful delivery of the submission has occurred.

27 This guideline is available on the AEMC's website.

Abbreviations

ABN	Australian Business Number
ACT	Australian Capital Territory
AEMC or Commission	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AGNL	Australian Gas Networks Ltd
DWGM	Declared Wholesale Gas Market
MOS	Market Operator Service
NGL	National Gas Law
NGO	National Gas Objective
NGR	National Gas Rules
NGR or rules	National Gas Rules
STTM	Short Term Trading Market