

22 June 2012

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Australian Energy Market Commission  
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FROM THE OFFICE OF THE  
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*John,*  
Dear Mr Pierce

### **Rule Change Request – Market Operator Service timing and eligibility**

AEMO requests the Australian Energy Market Commission (AEMC) make an amendment to the National Gas Rules (NGR) with regard to the timing of when Market Operator Service (MOS) offers are due and who is eligible to offer MOS in the Short Term Trading Market (STTM).

AEMO conducted a review of the operation of the STTM between August 2011 and March 2012, as prescribed in rule 489 of the NGR. The key recommendations with regard to the operation of MOS were to reduce the MOS period, alter the associated timings for MOS offers and the publication of MOS stacks, and to extend the eligibility to offer MOS in the market to any STTM Shipper, provided they have an agreement to do so, either directly from a pipeline operator, or from a contract holder.

A description and drafting of the proposed Rule, a statement of the issues concerning the existing NGR, and how the proposed Rule contributes to the achievement of the National Gas Objective is provided at Attachment A.

If made, AEMO would seek to incorporate this rule change in the September 2013 release of the market systems. To meet this objective would require an AEMC draft determination on the rule change by mid-January 2013.

AEMO would be pleased if you could have these matters considered by the AEMC. For further details, please do not hesitate to contact Terry Grimwade, Executive General Manager Market Performance on 03 9609 8520.

Yours sincerely



**Matt Zema**  
**Managing Director and Chief Executive Officer**

Attachments:

A. Rule Change Proposal

COVER LETTER - AEMC SUBMISSION - MOS

## Attachment A: Rule Change Proposal

This Rule Change Proposal is structured as follows:

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## 1 Summary

At present in the Short Term Trading Market (STTM), Market Operator Service (MOS) may only be offered into the market for pipeline balancing by eligible contract holders. MOS offers are made for a three month MOS period and MOS is settled on the basis of these offers for each day during that MOS period.

AEMO is proposing that the rules be modified to enable contract holders to sub-contract their rights to provide MOS to third parties if they so choose, and to support the reduction of the MOS period from three months to one month. This is expected to improve competition in the provision of MOS in the STTM.

## 2 Background

### 2.1 STTM

The STTM is a day-ahead market for natural gas at defined hubs (or demand centres). The STTM currently operates in Adelaide, Brisbane and Sydney.

STTM Shippers make offers to supply gas to the hub, while STTM Users and STTM Shippers make bids to withdraw gas at or from the hub. Bids and offers are submitted on the day before the relevant gas day (i.e. ex-ante), at which time AEMO determines the market price and the quantity of gas traded by STTM Shippers and STTM Users for that gas day. This schedule is published approximately 18 hours ahead of the gas day so that shippers can use this information as an input into their shipping nominations to the relevant facility operators, a process which occurs outside the STTM.

### 2.2 MOS

Market Operator Service (MOS) is a pipeline balancing service in the STTM that supplies demand in excess of the schedule, or absorbs any gas scheduled for delivery that is otherwise not required to meet withdrawals from the hub on the day. MOS is calculated as the difference between the final nominations made by shippers to the pipeline operator and the actual quantity of gas supplied to the market. MOS is determined separately for each pipeline facility supplying a hub each day after the gas day has ended. Allocation agents, who are appointed by STTM facility operators, submit allocation data to AEMO, which specifies how much each shipper delivered to the market and the quantity of MOS they provided. These allocations are known as “STTM Facility Allocations”.

MOS is provided to the market by eligible contract holders (MOS providers) who place offers to supply MOS for a 3 month MOS period. AEMO issues its estimate of the MOS requirements for the following MOS period based on historical requirements, and any other information supplied by pipeline operators, 40 business days prior to each MOS period. AEMO issues a notice advising the market when MOS offers are due, which may be no later than 15 business days before the start of the MOS period. This notice also outlines the eligibility requirements for MOS offers.

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Eligible contract holders submit their MOS offers by email to AEMO for the MOS period. AEMO then manually validates these offers and publishes the MOS stack 10 business days before the MOS period and provides this to pipeline operators. Allocation agents determine the MOS quantity for a facility and then allocate that MOS quantity to the MOS stack each gas day during the MOS period.

The duration of the MOS period was initially defined as a 3 month period to provide a balance between price certainty in the new market and the ability to change MOS offers depending upon seasonal requirements.

## 2.3 STTM Review

Under the National Gas Rules (**NGR**), the Australian Energy Market Operator (**AEMO**) is required to conduct a number of market reviews for the Short Term Trading Market (**STTM**). In particular, Part 20, Division 11, rule 489 of the NGR required AEMO to, by 31 March 2012, review:

- whether the graduated deviation parameters, the graduated variation parameters and the MOS cost cap are set at appropriate levels; and
- whether Division 6 (Market Operator Service) is operating effectively and efficiently; and
- options for the allocation of settlement surpluses and shortfalls on a daily basis; and
- to identify improvements in the operation of the STTM and the time period for implementation of those identified improvements.

Having regard to this, in August 2011, AEMO commenced a review of the STTM design to consider these issues and released its final report on 30 March 2012.

## 2.4 Review Findings

AEMO's key recommendations from the review related to MOS were

- Are the market operator services (MOS) operating effectively and efficiently?

AEMO considered that there was value in making changes to some elements of the MOS framework, which would improve its operation. AEMO recommended reducing the MOS period to monthly and opening up the provision of MOS to trading right holders.

- Is the MOS cost cap set at an appropriate level?

AEMO did not recommend a change to the MOS cost cap as part of the review prescribed under rule 489 (hereafter referred to as the STTM Phase 1 Review). AEMO noted the need for the MOS cost cap is largely tied to the MOS cost structure. The intent of the review of a within-day market, prescribed in rule 491, which commenced in April 2012, is to consider broader market design issues. As such AEMO considered it more appropriate to review the need and nature of the MOS cost cap in this context.

AEMO's recommendations arising from the review completed in March 2012 with regard to settlement surpluses and shortfalls, deviation parameters and market schedule variations (MSVs), will be dealt with in separate rule change proposals.

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## 3 Statement of Issues

### 3.1 Current NGR requirements

#### 3.1.1 Timings associated with the MOS offer process

The NGR defines the MOS period in rule 396 as a period of time for which MOS offers are to apply for the purposes of creating a MOS stack, while the duration of the MOS period is determined in the STTM Procedures and published by AEMO.

Rule 398 requires AEMO to issue a notice 40 business days prior to each MOS period requesting MOS offers and specifying submission dates, the relevant MOS period, a statement that an eligible contract holder must comply with the requirements of rules 399 and 400, and any other matter reasonably required, as specified in the STTM Procedures.

Currently rule 400(2) requires MOS increase offers and MOS decrease offers to be submitted no later than the date specified in AEMO's notice under rule 398, being no later than 15 business days before the start of the MOS period.

Rule 401(2) requires AEMO to publish MOS offers 10 business days before the commencement of each MOS period.

#### 3.1.2 Provision of MOS

The NGR currently defines a MOS provider as being an eligible contract holder whose MOS increase offer or MOS decrease offer (or any price step of that MOS increase offer or MOS decrease offer) is included by AEMO in a MOS stack in respect of that STTM pipeline for that MOS period.

The definitions in the NGR for a MOS decrease offer and a MOS increase offer both refer to an offer made by an eligible contract holder.

Rules 398, 399, 400 and 402 refer to eligible contract holders when describing who is requested to make MOS increase offers and MOS decrease offers and who is able to submit MOS increase offers and MOS decrease offers.

Rule 401(2) requires AEMO to make available to the STTM pipeline operator the MOS provider for each MOS offer.

Rule 403, regarding the procurement or provision of MOS by AEMO, refers to eligible contract holders in both the report AEMO is required to produce, and in discussing AEMO's role in providing MOS.

Rule 420 requires MOS to be allocated to the contract holder's registered trading right as part of the registered facility service allocation process.

Rule 421 requires allocation agents for an STTM pipeline to allocate MOS to MOS providers.

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## 3.2 Issue with current NGR requirements

Key observations regarding MOS to date have been that although the provision of MOS has been adequate on all but one gas day<sup>1</sup>, competition in the provision of MOS has been limited. The number of parties offering MOS at the Brisbane and Adelaide hubs has increased since market commencement. However, there have been no new entrants to the MOS market at the Sydney hub, with competition declining to the point where there was only one MOS provider on the Eastern Gas Pipeline (EGP) for the MOS periods from September 2011 to February 2012. There are now two MOS providers on the EGP. Further detailed analysis of actual MOS offers is presented in Appendix A. Two specific areas of the STTM design identified as contributing to this lack of competition are the duration of the MOS period, and who is able to offer MOS.

### 3.2.1 Duration of the MOS period

Currently, the MOS period is three months, aligning with seasons. Issues raised by stakeholders with this three month MOS period have been that it is too long to commit capacity for, and to be able to respond to competition within the MOS stack. The need to commit to a three month MOS period restricts some parties from participating in MOS, decreasing competition in the market. Parties may also offer MOS based upon their tightest potential capacity position over the three month period, potentially restricting how much MOS is offered on all other days. If a party has priced their MOS offers too high and is not frequently being allocated MOS, three months is considered to be a long time to be locked into a particular MOS stack. AEMO proposes to reduce the MOS period to one month via a change to the STTM Procedures.

### 3.2.2 Timings associated with the MOS offer process

AEMO currently accepts and validates MOS offers and generates the MOS stack manually. Manual market processes, like the MOS offer process, carry the risk of human error each time they are performed. The proposed change to decrease the length of the MOS period increases the likelihood of errors occurring in MOS offer processing, and increases the workload required to perform these manual functions. As such, AEMO proposes to automate this process and is, therefore, able to reduce these submission timings so that they are closer to the start of the MOS period. AEMO considers that a more regular MOS period also means that there is not a need to issue a notice requesting offers, as this becomes a more regular market activity.

The proposed reduction in timing for the MOS offer process is currently precluded by the NGR. The current timings in the rules for submission of MOS offers and the publishing of the MOS stack account for the current manual processing. The minimum time limits for these processes are specified in the rules and AEMO is required to advise (and is able to extend, but not shorten) the timings of offer submissions via a notice.

AEMO proposes to reduce the lead times associated with the MOS offer process that are currently set out in the NGR. As the duration of the MOS period is defined in the procedures, AEMO also

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<sup>1</sup> Overrun MOS was required on the EGP pipeline on 27 February 2012 due to an over-delivery caused by an anomaly in the code that was downloaded to the Horsley Park Remote Telemetry Unit (RTU) during the day

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proposes to move the timings associated with the MOS offer process from the NGR to the STTM Procedures.

MOS is an optional service in the market; there is no requirement for an STTM Shipper to make MOS offers. In the same way that the timing for submitting market schedule variations, also a voluntary transaction, has been included in the STTM Procedures, AEMO proposes to specify the timings for MOS offers and the publication time for MOS stacks in the STTM Procedures.

### **3.2.3 Provision of MOS by contract holders**

The rules currently limit the provision of MOS to eligible contract holders. This potentially limits competition in the STTM and prevents parties that cannot access direct contracts with a facility operator from adequately managing the market risks associated with the cost of MOS.

There is a finite capacity on a pipeline that can support the development of transportation services that could be used to supply MOS in the STTM. As such, it is possible that a pipeline operator may not be able to meet demand for new MOS contracts if all such capacity has already been contracted to existing shippers.

Further, on some pipelines, capacity is held by parties who do not actively trade in the STTM, but rather provide shipping services for sub-contracted parties via trading rights. These parties may, as part of their contracts, have access to services which support the provision of MOS, such as imbalance accounts or pipeline storage. This capacity could, therefore, be made available to supply MOS, but is currently not eligible under the NGR if the contract holders choose not to actively trade in the market, unnecessarily limiting availability and competition in MOS supply.

## **4 Proposed Solution and Rule**

### **4.1 Description of the Proposed Rule**

AEMO proposes to address the issues identified in section 3 as follows:

#### **Timings associated with the MOS offer process**

AEMO seeks to reduce the MOS period to one month. A pre-requisite for AEMO to reduce the MOS period is to automate the MOS offer submission and validation process. Currently the MOS offer and validation process is manual, which carries risk of error. AEMO proposes to automate the offer submission and validation processes at the same time as reducing the MOS period, given the increase to both workload and risk associated with manually submitting and validating MOS offers and compiling the MOS stack. This will allow for quicker validation of MOS offers and the publication of MOS stacks. Although the change to the MOS period can be achieved through the Procedure change process, AEMO considers that there are efficiency gains with respect to the timing of offer submissions and the publication of the MOS stack that can be made with the automation of the offer and validation process. These improvements require changes to the NGR to move the specification of the timing for the submission of MOS offers from a notice published by AEMO under the rules to the STTM Procedures and to reduce these timings.

The proposed rule would:

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- Remove the requirement for AEMO to publish a notice specifying when MOS offers are due, and instead move the specification of this timing into the STTM Procedures.
  - Move the timing requirement for the publishing of MOS stacks to the STTM Procedures.

### **Provision of MOS by trading right holders**

AEMO considers that a trading right holder who does not have a direct contract with a facility operator should not be excluded from being able to offer MOS provided a contract holder has granted them the right to do so on their behalf through a contractual arrangement.

The rules currently permit a contract holder to transfer capacity to a third party shipper to enable that shipper to supply gas in the ex ante market or as contingency gas. This proposal would extend the rights that can be transferred to a third party shipper to include the right to supply MOS.

AEMO proposes changes to the NGR as follows:

- Amend the definition of *MOS provider* to include all STTM Shippers rather than just eligible contract holders.
- Amend the definition of *MOS decrease offer* and *MOS increase offer* to reference offers being made by an STTM Shipper rather than an eligible contract holder.
- Remove the definition of *eligible contract holder*.
- Amend rules 399, 400, 402, 403 and 421 to refer to STTM Shippers rather than eligible contract holders, and registered trading rights rather than registered facility services.
- Extend rule 399(5) to allow either the STTM Shipper who submitted the offer or the contract holder for the related facility contract to notify AEMO if the conditions regarding eligibility to offer MOS as set out in rule 399(2) are no longer satisfied.
- Modify rule 401 so that AEMO is required to provide the relevant STTM facility operator with the identity of the contract holder associated with each MOS offer, rather than the MOS provider, whom they may not have a direct relationship with.
- Modify rule 420 to reflect that MOS is sub allocated to trading right holders in the STTM systems due to this change.

## **4.2 Why move the MOS offer submission timing and MOS stack publishing time from NGR to STTM Procedures**

The timing of MOS offer submissions and the subsequent timing of the publishing of the MOS stack were initially determined based upon a manual validation and publishing process. These timings are dependent on both the length of the MOS period, which is set in the STTM Procedures, and the process used for submitting and validating MOS offers, which is determined by both AEMO and pipeline operators' business processes and IT implementation. Automation of the MOS offer process means long lead times for MOS offer submission are not required and that timings are more easily adjustable based upon the MOS period. As the MOS period is reduced, MOS offers

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are likely to be required closer to the start of a MOS period to give further flexibility and efficiency to the MOS process. For example, the current proposal is to reduce the MOS period to one month, and to reduce the timing for the submission of MOS offers to approximately 5 business days ahead of the MOS period. This 5 day lead time allows time for pipeline operators to perform additional checks on the contractual eligibility of MOS providers or their contract holders, which AEMO does not have knowledge of. If MOS periods are reduced further in future, to weekly or daily, these processes may require further review and increased automation as the administrative burden to pipeline operators would significantly increase.

As part of its review of the operation of the STTM under NGR clause 489, AEMO considered both a weekly and a monthly MOS period, while some stakeholders preferred a daily MOS period. AEMO considered that a one month MOS period provided a balance between flexibility to respond to changing market conditions and price certainty of MOS. As the market matures and more experience is gained with a shorter MOS period, there is scope to further reduce the MOS period. Should the market seek to further reduce the MOS period in the future, it is likely that there would again be a need to review the MOS offer submission times and the validation processes conducted by both AEMO and pipeline operators. With these times specified in the rules, this would again require both a rule change and a procedure change, leading to inefficient use of the regulatory change processes and a duplication of administrative effort, which would increase the time required to implement changes. AEMO considers that both the MOS period and the timing for the submission of MOS offers and publication of MOS stacks should be specified within the same regulatory instrument as they are interdependent. As the MOS period is the more critical market parameter of the two, and is currently specified within the STTM Procedures, AEMO proposes that the associated timings are included in the STTM Procedures as well.

While prescribing the MOS offer submission timings and MOS stack publishing times in the NGR provides regulatory certainty to trading participants, this same certainty can be achieved by prescribing the MOS offer submission timings and MOS stack publishing times in the STTM Procedures, which is a formal regulatory instrument made by AEMO under the National Gas Law (NGL).

### **4.3 If the Rule is made, what will be included in the STTM Procedures?**

AEMO proposes to automate the MOS offer and validation process, meaning that the timings for the submission of MOS offers and the publication of MOS stacks can be much closer to the start of the MOS period. It is proposed to require MOS offers to be submitted approximately 5 business days ahead of the MOS period and to publish the MOS stack 1 hour later. The precise timing will be determined when detailed consultation of the required STTM Procedure and system changes to AEMO's and participants' systems are held.

This timing for the submission of MOS offers and the publishing of MOS stacks will be included in the STTM Procedures, as will other technical details currently described in rules 398 and 400.

If the AEMC issues a draft determination in support of this rule change proposal, AEMO will then commence a procedure change process to include the above detail and to reduce the MOS period to one month. As this also requires system changes, AEMO is seeking transitional rules to allow

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the rule, procedure and system changes to commence on a common gas day so as not to create regulatory uncertainty related to moving clauses from the NGR to the STTM Procedures.

#### **What other options were considered?**

AEMO considered maintaining the approach whereby the timings for when MOS offers are due, and when MOS stacks are published, are prescribed in the NGR, whilst removing the requirement for AEMO to advise these timings via a notice. However, as discussed in section 4.2, if the MOS period is further reduced in future, it is likely to require MOS offers to be submitted still closer to the start of the MOS period. If the timings remain prescribed in the NGR, this would again require a rule change and a procedure change, for what is essentially a procedural matter. As the MOS period is already in the STTM Procedures, and the rules allow AEMO to specify submission dates in a notice, AEMO considers it better to consolidate this information into a single instrument – the STTM Procedures.

#### **4.4 Draft of the proposed rule**

AEMO's draft rule is included in Appendix B.

#### **4.5 How the Proposed Rule addresses the identified issues**

AEMO considers that the proposed Rule addresses the issues outlined in section 3 of this rule change request as follows:

##### *Reduce the lead time of the MOS offer and validation process*

The proposed rule allows efficiency gains to be made through the automation of the MOS offer and validation process. While automation of this process does not require a rule change, automation allows MOS offers to be submitted closer to the start of the MOS period. This is expected to allow trading participants to respond to market, operational and seasonal conditions closer to the MOS period, leading to flexibility in the ability to submit offers and, therefore, likely more efficient prices for MOS offers.

##### *Allows AEMO to more effectively manage a reduced MOS period*

Automation of MOS offers is required for AEMO to be able to implement a shorter MOS period, which would otherwise increase the manual workload for AEMO staff and increase the risk of making errors in MOS offer validation and the formation of the MOS stack. Moving the specified timings related to the MOS offer process to the STTM Procedures allows this process to be reviewed and changed in light of any future changes to the MOS period without requiring rule change each time.

##### *Allows trading right holders to offer MOS*

The proposed rule allows contract holders to sub-allocate their rights to offer MOS to third parties, as is currently allowed for the ex ante and contingency gas markets.

## 4.6 Other requirements of the NGR

Compatibility with AEMO's declared system functions under s295(5) of the National Gas Law –

This rule only impacts market participants in the Short Term Trading Market, where AEMO has no declared system functions in gas; therefore this change is not incompatible with the proper performance of AEMO's declared system functions.

## 5 How the Proposed Rule Contributes to the National Gas Objective

Before the AEMC can make a Rule change it must apply the rule making test set out in the National Gas Law (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.

AEMO considers that the proposed Rule is likely to contribute to the NGO for the following reasons:

- *Improve the efficiency of MOS pricing*

Reducing the lead times for offer submission prior to a MOS period and reducing the MOS period is expected to allow trading participants to respond to market, operational and seasonal conditions closer to the MOS period leading to more efficient prices for MOS offers.

- *Increase competition in the provision of MOS*

Amending the MOS framework to allow trading right holders to make MOS offers, will increase the potential number of MOS suppliers and should thereby increase the competition for the supply of MOS. This is expected to lead to more efficient pricing of MOS offers and more efficient use of pipeline services.

- *Increase the efficiency of pipeline investment*

Allowing MOS services to be subcontracted provides the buyer of storage services with the ability to transfer the right to supply MOS under a commercial arrangement to a third party. This reduces the risk associated with a long term commitment for storage services on a pipeline, supporting the efficient investment in pipeline capacity and services.

Overall, this rule change will improve competition in the provision of MOS and lead to more efficient pricing of MOS. This increases the efficiency of the use of natural gas services.

## 6 Expected Benefits and Costs of the Proposed Rule

### Timings associated with the MOS offer process

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Reducing the lead times prior to each MOS period as through this rule change proposal would mean that trading participants potentially have more accurate information about expected conditions, both market and operational, for the upcoming MOS period, and have more experience of the immediately preceding MOS period before having to make their offers. This is expected to lead to more efficient pricing for MOS.

Parties impacted by this rule change proposal are pipeline operators and trading participants. Reducing the MOS period and its lead times for offer submission mean this report will be updated more frequently and supplied closer to the start of a new MOS period, however this is not expected to have an impact on pipeline operators' systems, as these are already capable of responding to changes to a MOS stack, which may occur if a participant is removed from the MOS stack mid-way through a MOS period, as described in rule 402. Trading participants who deviate in the ex post market are expected to benefit from increased competition through more efficient costs of MOS. This is expected to result in an overall reduction in MOS costs.

The majority of AEMO's costs associated with reducing the MOS period and lead times are for the automation of the MOS offer process. This is estimated to cost \$80,000 for the IT implementation. Note that the costs for allowing trading right holders to offer MOS are additional and are discussed in the following subsection. The implementation cost is offset by labour savings within AEMO for the effort required to manually validate and compile the MOS stacks, of approximately \$72,000 per annum for a one month MOS period. This gives the cost of automating MOS approximately a one year payback. Automation also eliminates the risk of mistakes in processing MOS offers as part of the AEMO process.

STTM shippers are expected to benefit from efficiency gains resulting from shorter lead times and an automated MOS offer process, as they will be able to automate their own systems if they choose, rather than having to rely on email. They will also benefit from more immediate validation of their MOS offer as it gives them the opportunity to correct any errors immediately, rather than having to wait up to 2 days for the current manual validation feedback.

STTM shippers offering MOS will need to make changes to their own business processes and systems to submit MOS offers via the STTM Web Exchanger (S-WEX) or the STTM Web Exchanger Interface Engine (S-WEXIE) rather than via email. This will incur some cost to these parties. The design of the automated transactions will be based on the current format and manual validations to minimise the impact on trading participants that have developed systems to generate the MOS offers.

### **Provision of MOS by trading right holders**

AEMO considers that there are a number of potential benefits for trading right holders, existing and potential contract holders and STTM users.

Participation of trading participants in the supply of MOS allows them to better manage the MOS related costs they incur as a result of deviations from their STTM schedule.

The proposal could increase the potential supply sources allowing a trading participant to become a MOS provider. The right to supply MOS in the STTM may currently be held by shippers that do not wish to trade gas in the STTM. On a pipeline where the majority of storage related capacity

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has already been contracted there may be limited opportunity for a trading right holder to become a MOS provider. If a trading right holder can contract for the right to supply MOS with an existing contract holder then it could create an opportunity for that trading right holder to become a MOS provider.

An increase in the number of MOS providers is likely to be a benefit for trading participants at a hub. The participation of trading right holders would increase the competition for the supply of MOS and, as a result, decrease the cost of MOS and, in turn, the charges for deviations, currently recovered via shortfall charges at the end of a billing period.

The proposal also creates an alternative source of revenue for a contract holder that does not wish to trade gas in the STTM. The implementation of the proposal would allow the contract holder to earn a return on their contract holding by entering into a commercial arrangement with another shipper to transfer the right to supply MOS, similar to the current process of transferring rights to capacity via trading rights that is allowed in the ex ante market scheduling.

Similarly, the proposal should also benefit potential shippers considering a long term investment for the expansion of storage capacity on a pipeline. The proposal provides a buyer of storage services with the option of reducing its involvement in the STTM by allowing the transfer of the right to supply MOS to another trading participant. As such, the proposal should reduce the risk profile associated with a long term commitment for storage services on a pipeline.

AEMO considers that there is potential value in the implementation of the proposal. However, it is difficult to quantify the magnitude of any benefit due to the uncertainty around the number of shippers that will utilise the proposed functionality. Whether shippers can, or are willing to, subcontract MOS capacity may in part depend upon the nature of the contracts available for MOS on an individual pipeline. AEMO understands that different pipelines offer different types of contracts for providing MOS, and this may have a bearing on whether this contract can be subcontracted to a third party. This proposal will give parties the ability to transfer the rights to offer MOS but does not compel them to do so. Nonetheless, AEMO considers that there should not be a regulatory restriction preventing parties wishing to transfer capacity for providing MOS from doing so. Responses to AEMO's consultation during the STTM Phase 1 Review were largely in favour of allowing wider participation in the provision of MOS.

Observation of MOS pricing curves in the STTM to date shows that when the number of MOS providers has increased, there has been downward pressure on the cost of MOS, with greater quantities of lower priced MOS available in the MOS stacks. Conversely, where competition in the provision of MOS has decreased, there has been upward pressure on MOS prices and less MOS available at lower prices.

AEMO considers that the persons likely to be affected by the proposed Rule are trading participants. Trading Participants who deviate in the STTM are expected to benefit from more efficient MOS costs arising from the increase in competition. The implementation of the proposal is being designed to not have any impact on the current allocation processes, therefore no changes to allocation processes are expected for pipeline operators nor contract holders.

The proposal to extend the provision of MOS to trading right holders would require changes to AEMO's systems. AEMO expects its implementation costs for this proposal to be approximately \$160,000 up front; however there would be synergies in the order of \$40,000 in implementing alongside the automation of the MOS offer process proposed above.

## Appendix A: Analysis

### MOS Participation

Table 1: Number of participants offering MOS

MOS period	Number of Parties offering MOS. <span style="float: right;">Note I = increase MOS, D = decrease MOS</span>				
	Adelaide		Sydney		Brisbane
	MAP	SEAGAS	MSP	EGP	RBP
Sep 2010 – Nov 2010	I: 2 D: 2	I: 2 D: 1	I: 4 D: 4	I: 2 D: 2	N/A
Dec 2010 – Feb 2011	I: 2 D: 2	I: 2 D: 1	I: 4 D: 4	I: 2 D: 3	N/A
Mar 2011 – May 2011	I: 3 D: 3	I: 2 D: 2	I: 3* D: 3	I: 2 D: 2	N/A
Jun 2011 – Aug 2011	I: 4 D: 4	I: 2 D: 2	I: 3 D: 3	I: 2 D: 2	N/A
Sep 2011 – Nov 2011	I: 4 D: 4	I: 2 D: 3	I: 3 D: 3	I: 1 D: 1	N/A
Dec 2011 – Feb 2012	I: 4 D: 4	I: 3 D: 4	I: 3 D: 3	I: 1 D: 1	I: 4 D: 4
Mar 2012 – May 2012	I: 4 D: 4	I: 3 D: 4	I: 3 D: 3	I: 2 D: 2	I: 5 D: 5

\* Ausgrid was formerly EnergyAustralia and the gas contracts were transferred to TRUenergy as from March 2011

\*\* Minimum number of parties participating highlighted for each facility.

## Appendix B: Draft Rule

This Appendix outlined the proposed changes to the NGR covered by the Rule change proposal.

It is noted that strikethroughs in red represent deletions to the NGR as a result of the Rule change and insertions are represented by text in blue underline. This draft is based on version 12 of the NGR.

### Part 20, Division 1

#### 364 Definitions

In this Part:

~~eligible contract holder~~ means ~~a contract holder in respect of a facility contract under which a registered facility service is provided by means of an STTM pipeline.~~

**MOS period** – See rule 396.

**MOS decrease offer** means an offer made ~~by an eligible contract holder~~ in accordance with rule 400 to provide MOS by decreasing the quantity of natural gas supplied to, or increasing the quantity of natural gas withdrawn from, a hub using an STTM pipeline ~~by that eligible contract holder.~~

**MOS increase offer** means an offer made ~~by an eligible contract holder~~ in accordance with rule 400 to provide MOS by increasing the quantity of natural gas supplied to, or decreasing the quantity of natural gas withdrawn from, a hub using an STTM pipeline ~~by that eligible contract holder.~~

**MOS provider** for an STTM pipeline and a MOS period means:

- (a) ~~an eligible contract holder~~ an STTM Shipper whose MOS increase offer or MOS decrease offer (or any price step of that MOS increase offer or MOS decrease offer) is included by AEMO in a MOS stack ~~in respect of~~ for that STTM pipeline ~~for that~~ and MOS period; or
- (b) any other person, including AEMO, to the extent that person provides MOS as a result of the process contemplated under rule 403(3).

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**Part 20, Division 6****398 ~~[Deleted] Request for MOS increase offers and MOS decrease offers~~**

- ~~(1) AEMO must, no later than 40 business days before the start of a MOS period, publish a notice requesting from eligible contract holders, MOS increase offers and MOS decrease offers for each STTM pipeline.~~
- ~~(2) A notice under subrule (1) must specify:~~
- ~~(a) the relevant MOS period; and~~
  - ~~(b) the date by which final MOS increase offers and MOS decrease offers must be submitted to AEMO, being no later than 15 business days before the start of the MOS period; and~~
  - ~~(c) a statement that an eligible contract holder must comply with the requirements of rules 399 and 400 in respect of its MOS increase offer or MOS decrease offer; and~~
  - ~~(d) any other matter reasonably required for the purposes of AEMO's functions under this Part, as specified in the STTM Procedures.~~

**399 Conditions relating to MOS**

- (1) An STTM Shipper ~~person~~ must not submit a MOS increase offer or MOS decrease offer unless ~~it that person~~ is an eligible contract trading right holder in respect of a registered facility service provided by means of ~~for~~ the STTM pipeline to which the MOS increase offer or MOS decrease offer relates.
- (2) An STTM Shipper ~~eligible contract holder~~ must not submit a MOS increase offer or MOS decrease offer in respect of a MOS period unless it is entitled, under one or more registered ~~facility services trading rights~~, to increase or decrease the quantity of natural gas supplied to or withdrawn from a hub by that eligible contract holder through using the relevant STTM pipeline in accordance with its MOS increase offer or MOS decrease offer.
- (3) For the purposes of subrule (2), in determining whether an ~~eligible contract holder~~ STTM Shipper is entitled to increase or decrease a quantity of natural gas supplied or withdrawn, any allocation or potential allocation of overrun MOS to that ~~eligible contract holder~~ STTM Shipper under rule 421 is to be disregarded.
- (4) An ~~eligible contract holder~~ STTM Shipper must ensure that the condition in subrule (2) continues to be satisfied from the time the MOS increase offer or MOS decrease offer is submitted until the end of the MOS period to which the MOS increase offer or MOS decrease offer relates.
- (5) If, at any time after the submission of a MOS increase offer or a MOS decrease offer:
- (a) the STTM Shipper who submitted that offer; or
  - (b) the contract holder for a related facility contract,

~~An eligible contract holder must immediately notify AEMO if it becomes aware at any time after submitting a MOS increase offer or MOS decrease offer that the condition set out in subrule (2) is no longer satisfied~~ in respect of that offer, it must immediately notify AEMO.

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- (6) ~~An eligible contract holder or other~~ person must not:
- (a) make a nomination or renomination in respect of an STTM pipeline; or
  - (b) do any other thing,
- for the purpose, or primary purpose, of creating or increasing a pipeline deviation for which MOS may be required.

#### 400 Making MOS increase offers or MOS decrease offers

- ~~(1) Subject to rule 399, an eligible contract holder STTM Shipper may submit a MOS increase offer or MOS decrease offer, or both, for an STTM pipeline and a MOS period in accordance with the requirements set out in the STTM Procedures. ~~this rule 400.~~~~
- ~~(2) MOS increase offers and MOS decrease offers must be made no later than the date specified in AEMO's notice under rule 398 but, if submitted before that date, may be revised at any time until that date.~~
- ~~(3) A MOS increase offer or MOS decrease offer may only relate to one STTM pipeline.~~
- ~~(4) A MOS increase offer or MOS decrease offer must comply with the requirements set out in the STTM Procedures.~~

#### 401 MOS stacks

- (1) AEMO must determine, in accordance with the STTM Procedures:
- (a) which MOS increase offers (or parts of those offers) are to be included in a MOS increase stack and the order in which they are to be included; and
  - (b) which MOS decrease offers (or parts of those offers) are to be included in a MOS decrease stack and the order in which they are to be included; and
  - (c) if applicable, how MOS provided or procured as a result of the process contemplated under rule 403 is to be represented in the MOS stack,
- and must produce a MOS increase stack and a MOS decrease stack for each STTM pipeline containing the information set out in the STTM Procedures.
- (2) ~~No later than 10 business days before the commencement of~~For each MOS period, AEMO must, by the time specified in the STTM Procedures:
- (a) publish the following information for each MOS increase offer and MOS decrease offer included in the MOS stack for that MOS period:
    - (i) the relevant MOS provider; and
    - (ii) the STTM pipeline to which the MOS increase offer or MOS decrease offer relates; and
    - (iii) the prices and quantities in each price step; and
  - (b) make available to each relevant ~~the information in paragraph (a) available to the~~ STTM pipeline operator for the applicable MOS stack:
    - (i) the contract holder associated with each ~~MOS provider; and~~

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- ~~(ii) the STTM pipeline to which the~~ MOS increase offer or MOS decrease offer relates; and
  - (iii) the prices and quantities in each price step; and
  - ~~for the STTM pipeline to which the MOS increase offer or MOS decrease offer relates; and~~
  - (c) comply with any requirements in the STTM Procedures in relation to publishing MOS stacks and making information available to STTM pipeline operators.

## 402 Additional requirements for MOS stacks

- (1) If AEMO is notified:
  - (a) by an ~~eligible contract holder~~ [STTM Shipper](#) under rule 399(5) that the condition set out in rule 399(2) is no longer satisfied in relation to a MOS increase offer or MOS decrease offer;
  - (b) by a contract issuer under rule 395 that a registered facility service referred to in a MOS increase offer or MOS decrease offer has ceased or will cease to be available to the relevant contract holder during the MOS period; or
  - (c) by an allocation agent under rule 421(6) that it has not allocated MOS to [the contract holder associated with](#) a price step of a MOS increase offer or MOS decrease offer ~~submitted by the relevant contract holder~~,

AEMO must:

- (d) if the notification is received prior to the publication of the MOS stack for the MOS period in respect of which the relevant ~~contract holder~~ [STTM Shipper](#) submitted the MOS increase offer or MOS decrease offer, disregard that MOS increase offer or MOS decrease offer and not include it in any MOS stack; or
  - (e) if the notification is received after the publication of the MOS stack that includes the MOS increase offer or MOS decrease offer:
    - (i) in the case of a notification received under paragraph (a) or (c) – promptly determine a revised MOS stack in accordance with rule 401(1), but disregarding any MOS quantity previously included in respect of that MOS increase offer or MOS decrease offer; or
    - (ii) in the case of a notification received under paragraph (b) – before the gas day on which the relevant registered facility service ceases to be available, determine a revised MOS stack in accordance with rule 401(1), to be effective from the gas day on which that registered facility service ceases to be available, but disregarding any MOS quantity previously included in respect of that MOS increase offer or MOS decrease offer.
- (2) If:
    - (a) AEMO suspends the registration of ~~an eligible contract holder~~ [an STTM Shipper as an STTM Shipper](#) at the relevant hub; and
    - (b) that ~~eligible contract holder~~ [STTM Shipper](#) has submitted a MOS decrease offer for a current or prospective MOS period,

AEMO must:

- (c) if the suspension occurs prior to the publication of a MOS decrease stack for the MOS period, disregard that MOS decrease offer and not include it in any MOS decrease stack; or

- 
- (d) if the suspension occurs after the publication of a MOS decrease stack that includes the MOS decrease offer, promptly determine a revised MOS decrease stack in accordance with rule 401(1), but disregarding any MOS quantity previously included in respect of that MOS decrease offer.
- (3) AEMO must publish the information in rule 401(2)(a) ~~in respect of any revised MOS stack~~ and make ~~that information~~ the information in rule 401(2)(b) available to the relevant STTM pipeline operator in respect of any revised MOS stack as soon as practicable.

### 403 Procurement or provision of MOS by AEMO

[...]

- (2) A report under subrule (1) must:
- (a) state whether, in AEMO's opinion, the causes of the MOS shortfall:
- (i) can reasonably be expected to be resolved through action taken by participants in the gas industry within a reasonable timeframe, and if so whether any changes to the rules in this Part are likely to encourage that action; or
- (ii) are unlikely to be resolved within a reasonable timeframe unless AEMO procures or facilitates the provision of MOS; and
- (b) if paragraph (a)(ii) applies:
- (i) include at least one proposal on how AEMO may procure or facilitate the provision of MOS; and
- (ii) for each such proposal, include an assessment of:
- (A) the costs of implementing the proposal and the subsequent provision of MOS under these rules; and
- (B) the likely impact of the proposal on the provision of MOS by ~~eligible contract holders~~ STTM Shippers; and
- (iii) indicate a recommended proposal taking into account:
- (A) the principle that any additional costs to be paid by or recovered from Trading Participants should be minimised; and
- (B) the principle that, as far as possible, commercial incentives for ~~eligible contract holders~~ STTM Shippers to offer to provide MOS should be preserved; and
- (C) any other matter AEMO considers relevant; and
- (c) be published by AEMO.
- [...]
- (4) If AEMO becomes ~~an eligible~~ contract holder or acquires trading rights as a result of implementing a proposal under this rule, AEMO:
- (a) is not required to be registered as an STTM Shipper; and
- (b) is subject to the conditions in rule 399 relating to MOS increase offers and MOS decrease offers; and

- 
- (c) must determine its MOS increase offers and MOS decrease offers by the relevant date specified ~~in rule 398~~ [in the STTM Procedures](#); and
  - (d) is to make or receive payments for MOS and MOS gas under Division 10 as if it were an STTM Shipper.

## Part 20, Division 7

### 420 Registered facility service allocations

[...]

- (3) An allocation notice for a registered facility service must contain, for the gas day (or each gas day in the billing period) to which the notice relates:
  - (a) the registered facility service allocation for each registered trading right that relates to the registered facility service; and

**Note:**

A registered facility service allocation must be provided for each registered trading right in respect of the relevant registered facility service, even if that allocation is zero.

  - (b) the quantity of MOS and overrun MOS allocated to the registered facility service, which must be allocated ~~to~~:
    - (i) [in the case of MOS, to the relevant MOS provider's registered trading right;](#)  
[and](#)
    - (ii) [in the case of overrun MOS, to](#) the contract holder's registered trading right;  
and
  - (c) any other matter reasonably required for the purposes of AEMO's functions under this Part, as specified in the STTM Procedures.

### 421 Allocation of pipeline deviations (MOS)

- (1) Subject to subrules (4) and (5), if there is a pipeline deviation for a gas day for an STTM pipeline, the allocation agent for that STTM pipeline must, in preparing the STTM facility allocations for registered facility services that are provided by means of that STTM pipeline, allocate that pipeline deviation [to STTM Shippers](#):
  - (a) as MOS, ~~to MOS providers~~ in accordance with the applicable MOS stack for the relevant MOS period, to the extent that sufficient MOS quantities are available in the MOS stack; and
  - (b) where there are no available MOS quantities for that STTM pipeline, as overrun MOS ~~to STTM Shippers~~ in accordance with any applicable allocation agreement or arrangement for that STTM pipeline.
- (2) The allocation agent for an STTM pipeline must allocate MOS under subrule (1)(a):
  - (a) to a registered facility service [that is provided under a facility contract of the STTM Shipper who is the contract holder associated with the MOS provider to which the](#) relevant MOS quantity ~~relates~~; and
  - (b) on a pro rata basis as between two or more price steps in the MOS stack which have the same price.

- (3) The allocation agent for an STTM pipeline must allocate overrun MOS under subrule (1)(b) to a registered facility service that is provided under a facility contract in respect of which the relevant STTM Shipper is the contract holder.
- (4) An allocation agent must not allocate a part of a pipeline deviation for a gas day for an STTM pipeline to an STTM Shipper ~~a MOS provider~~ as MOS or ~~to an STTM Shipper~~ ~~as~~ overrun MOS under subrule (1) if:
- the contract issuer has notified AEMO under rule 395 that the registered facility service to which pipeline deviations would otherwise be allocated has ceased to be available; or
  - the allocation of that quantity to the relevant registered facility service would result in the STTM facility allocation for that service being a quantity less than OGJ.

**Example:**

If the STTM facility allocation for a registered facility service for flow to the hub is 100 before the allocation of pipeline deviations, the aggregate quantity allocated to that same service from the MOS decrease stack and any overrun MOS cannot exceed 100.

- (5) An allocation agent is not required to allocate a part of a pipeline deviation for an STTM pipeline for a gas day to an STTM Shipper ~~a MOS provider~~ as MOS under subrule (1)(a):
- in accordance with a MOS increase stack if the allocation of that quantity would result in the total quantity of MOS allocated to that STTM Shipper ~~MOS provider~~ for that STTM pipeline and gas day exceeding:
    - the sum of the MOS quantity for all price steps for which that STTM Shipper is the associated contract holder in ~~that MOS provider's MOS increase offer as specified in~~ the MOS increase stack; less
    - the quantity of overrun MOS allocated to that ~~MOS provider (as an STTM Shipper)~~ on that STTM pipeline on the previous gas day to increase the flow of natural gas to the hub; or
  - in accordance with a MOS decrease stack if the allocation of that quantity would result in the total quantity of MOS allocated to that STTM Shipper ~~MOS provider~~ for that STTM pipeline and gas day exceeding:
    - the sum of the MOS quantity for all price steps for which that STTM Shipper is the associated contract holder in ~~that MOS provider's MOS decrease offer as specified in~~ the MOS decrease stack; less
    - the quantity of overrun MOS allocated to that ~~MOS provider (as an STTM Shipper)~~ on that STTM pipeline on the previous gas day to decrease the flow of natural gas to the hub; or
  - if that quantity cannot otherwise be allocated to that STTM Shipper ~~MOS provider~~ in accordance with the terms of the applicable facility contract.
- (6) If an allocation agent does not allocate a part of a pipeline deviation to an STTM Shipper ~~MOS provider~~ for the reason specified in subrule (5)(c), the allocation agent must notify AEMO of that fact and the name of the STTM Shipper ~~MOS provider~~ as soon as practicable.

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## Transitional Rules

(1) From the commencement date to the date on which the STTM Procedures are amended to specify the timing requirements for the submission of MOS offers and the publication of MOS stacks:

(a) old rules 398, 399, 400, 401, 402, 403, 420 and 421 continue to apply; and

(b) new rules 398, 399, 400, 401, 402, 403, 420 and 421 have no effect.

## Appendix C: Consultation

This Appendix outlines the consultation undertaken by AEMO with respect to the proposed rule change.

### **Nature of the consultation**

AEMO conducted its review of the operation of the STTM, as prescribed in rule 489, using the extended consultative procedure described in rule 9A of the NGR.

This process began with the release of AEMO's STTM Reviews Phase 1 – Discussion Paper on 16 August 2011. This paper was published on AEMO's website and was open for public consultation for 28 days, with submissions due on 23 September 2011.

As part of its consideration of issues raised by stakeholders, AEMO conducted a public workshop on STTM design and operational issues on 14 November. Notes from this workshop were published on AEMO's website.

Following consideration of the issues raised in both submissions and at the workshop, AEMO released its draft report publically on 19 December 2011. This paper invited comment by 3 February 2012, allowing 29 business days for consultation.

A further public workshop on STTM design and operational issues was held on 20 February 2012 to further discuss details proposed by AEMO in its draft report and provided in submissions to this report.

AEMO released its final report on 30 March 2012, concluding the consultation.

The notes and information for the consultation papers and workshops have been published on AEMO's website on the STTM Reviews page: <http://www.aemo.com.au/en/Gas/Wholesale-Gas-Markets/Short-Term-Trading-Market/Review-of-Short-Term-Trading-Market>.

### **Content of the consultation – MOS specific**

AEMO raised, amongst other things, concerns with competition in the provision of MOS in its STTM Reviews Phase 1 – Discussion Paper and discussed whether the MOS period might impact this. Comments were sought specifically on:

- Are there any views or concerns over participation in the provision of MOS, and if so, what are they?
- Does the MOS framework need to change, and if yes, how?

- 
- Is the MOS pricing structure, including the MOS cost cap, appropriate?

Submissions to the discussion paper put forth views ranging from a daily MOS period to no change to the MOS period. The issue of whether parties who have no relationship with a pipeline operator could offer MOS via a subcontracted right with a contract holder was also raised in submissions.

In its draft report, AEMO discussed three options for the MOS period - daily, weekly and monthly, and expressed a preference for a monthly MOS period. AEMO also examined the issue of allowing a subcontracted party to offer MOS, and expressed that it saw value in extending the provision of MOS to these parties. Further views were sought on both proposals.

Submissions to the draft report again expressed views ranging from daily MOS to no change to the MOS period (3 months), however, most submissions were supportive of a monthly MOS period as an interim measure to a wider review of balancing services in the STTM (this will be considered as part the STTM intraday review which is currently underway). The issue was discussed at a public workshop where the options of retaining a three month MOS estimate and automating the MOS offer process to reduce lead times ahead of the MOS period were workshopped.

Feedback on the issue of allowing subcontracted parties to offer MOS was mixed although a majority of submissions supported the proposal, noting that it would encourage liquidity in the provision of MOS. Issues were raised about how the process could work given pipeline operators, who are responsible for allocating MOS, do not have visibility of the trading right holder. The issue was further discussed at a public workshop held by AEMO to work through some of the associated process issues.

AEMO's final report recommended reducing the MOS period to one month, and automating the offer process to reduce lead times for offer submission, and retaining a three month MOS estimate. AEMO considered that daily MOS would require more fundamental change to how MOS works than simply changing the MOS period, and as such recommended deferring this option to the intraday review of the STTM, due by the end of 2012. A monthly MOS period was recommended over a weekly MOS period to provide a balance between price certainty (and therefore risk) for the market and the ability for shippers to enter and exit the MOS market.

AEMO also recommended extending the ability to provide MOS to subcontracted parties and identified that systems and processes could be designed such that pipeline operator's allocation processes would not impacted.

## Glossary

Term or Abbreviation	Explanation
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
EGP	Eastern Gas Pipeline (Longford to Sydney)
MAP	Moomba to Adelaide Pipeline
MOS	Market Operator Services
MSP	Moomba to Sydney Pipeline
NGL	National Gas Law
NGO	The National Gas Objective as stated in section 23 of the NGL
NGR	National Gas Rules
RBP	Roma to Brisbane Pipeline
SEAGAS	SEA Gas Pipeline (Port Campbell to Adelaide)
STTM	Short Term Trading Market
STTM-CF	STTM Consultative Forum