

Australian Energy Market Commission

RULE DETERMINATION

National Gas Amendment (STTM Deviations and the Settlement Surplus and Shortfall) Rule 2013

Rule Proponent

Australian Energy Market Operator

20 June 2013

For and on behalf of the Australian Energy Market Commission

**RULE
CHANGE**

Inquiries

Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

E: aemc@aemc.gov.au

T: (02) 8296 7800

F: (02) 8296 7899

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About the AEMC

The Council of Australian Governments (COAG), through its then Ministerial Council on Energy (MCE), established the Australian Energy Market Commission (AEMC) in July 2005. In June 2011, COAG established the Standing Council on Energy and Resources (SCER) to replace the MCE. The AEMC has two main functions. We make and amend the national electricity, gas and energy retail rules, and we conduct independent reviews of the energy markets for the SCER.

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Summary of final rule determination

The Australian Energy Market Commission (AEMC, the Commission) has decided to make a final rule in relation to the “Short Term Trading Market (STTM) deviations and the settlement surplus and shortfall” rule change request. The final rule, which is a more preferable rule, will commence on 1 May 2014.

The final rule largely adopts the changes to the National Gas Rules (NGR) proposed by the Australian Energy Market Operator (AEMO), or Proponent, in their rule change request. The final rule also amends the NGR to include a set of principles to guide AEMO in developing deviation pricing arrangements. The principles include setting deviation charges and payments that:

- promote the economically efficient operation of the STTM by efficiently allocating the risks associated with deviating from daily gas schedules;
- reflect the costs of providing Market Operator Services (MOS) and minimise any settlement shortfall charges or settlement surplus payment;
- aim to limit the liability of trading participants in relation to deviation pricing; and
- allocate any settlement charge or settlement surplus payment to trading participants based on their share of deviations.

Specifically, the amendments proposed in the rule change request sought to facilitate a deviation pricing framework that balanced the incentives on trading participants to forecast accurately with the risks of participating in the STTM. However, the Commission's approach to this matter has been to develop a deviation pricing framework that is supported by principles that efficiently allocate the risks associated with trading participants deviating from their daily gas market schedules and the consequences for the STTM.

The original rule change request was submitted by AEMO on 16 July 2012. The rule change request proposed amendments to the NGR aimed at strengthening the "causer pays" principles that support the deviation pricing framework.

Deviations arise when trading participants do not meet commitments made in their daily gas schedule. Deviations can either be “long” or “short”, depending on whether a trading participant has supplied or withdrawn more or less gas than scheduled through the STTM ex ante gas market process.

If the trading participant’s deviation is short, then AEMO charges that trading participant a “deviation charge”. If the deviation is long, then AEMO pays the trading participant a “deviation payment”.

The exchange of payments between trading participants and AEMO is then used to cover the costs of providing MOS, which is used to balance the gas market when

deviations arise. “Increase” MOS is provided where more gas has been withdrawn than scheduled. “Decrease” MOS is provided where less gas has been withdrawn than scheduled.

AEMO considered that two main issues arise with the current arrangements:

- There is a poor alignment between the costs of providing MOS to the market compared to the price paid, or charged, to trading participants for their deviations which cause MOS. This disparity had created large monthly financial settlement shortfalls in the market which have had to be funded by trading participants through shortfall charges;
- The graduated deviation parameters have been ineffective in recovering sufficient funds to recover the costs associated with providing MOS to the STTM. As a result, AEMO has recommended that the parameters should be deleted from the NGR. AEMO aims to better reflect the causer pays principle in the deviation pricing design via a change to the STTM Procedures that will seek to introduce the average cost of MOS incurred on a day into the deviation pricing structure.

AEMO’s rule change request contained three key amendments to strengthen the causer pays principles and parameters supporting the deviation pricing framework. These included:

- amending the definition of “minimum market price” (MMP) and “market price cap” (MPC) to clarify that deviation prices do not relate to gas traded at a hub on a gas day;
- amending the definition of “deviation payment” and “deviation charge” to enable trading participants to be charged for deviations that result in a cost to the market, instead of accruing those payments and charges to the monthly settlement process; and
- deleting the “settlement surplus cap” and the “graduated deviation parameters” from the NGR. AEMO considered that with the changes envisaged to the deviation pricing arrangements, the graduated deviation parameters would no longer be required.

The Commission has assessed the issues raised by the rule change request and has made a final rule, which is a more preferable rule, that largely adopts the amendments proposed by AEMO, subject to some exceptions.

These exceptions include a decision to not amend the definitions for MMP and MPC. Instead, a new definition for “deviation price” will be created to clarify that the MMP and MPC do not relate to gas traded at a hub on a gas day.

In addition, the final rule creates a set of high level principles and parameters regarding deviation pricing for inclusion in the NGR. The principles and parameters are intended to guide AEMO in regard to any future enhancement of the deviation

pricing framework that is to be implemented through changes to the Procedures. The principles and parameters aim to efficiently allocate the risks associated with trading participants deviating from their daily gas schedules, and balance these risks against the financial risks of participating in the STTM.

By strengthening the causer pays principles and parameters supporting the deviation pricing framework, and largely adopting the changes proposed by AEMO, the Commission considers that the final rule has the potential to reduce the financial risks of participating in the STTM and, therefore, facilitate lower barriers to entry. The Commission also considers that the new deviation pricing arrangements are likely to lead to improved price signals and certainty in the STTM, which will clarify to trading participants the costs associated with deviating from daily gas market schedules.

The final rule, which is to commence on 1 May 2014, has been published with this final rule determination.

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1 AEMO's rule change request

The amendments proposed by the Australian Energy Market Operator (AEMO) in the rule change request arise from their review of the Short Term Trading Market (STTM) for natural gas, completed in March 2012. The statutory review considered a range of matters relating to the operation of the STTM and, in particular, the design of the deviation pricing framework.¹

In the review, AEMO concluded that the current design of deviation pricing framework leads to a misalignment between the costs to the market resulting from Market Operator Services (MOS), which is the market's pipeline deviation balancing tool, and the revenue to the market resulting from deviation charges and deviation payments. As part of the review, AEMO proposed that the deviation pricing framework should be modified to better align deviation charges and deviation payments with the costs to the market of providing MOS.

AEMO considered that the changes proposed in this rule change request were necessary in the context of its envisaged overall changes to the deviation pricing design and settlement process under the National Gas Rules (NGR) and the STTM Procedures (Procedures).

The remainder of this chapter describes the rule change request and also includes background information regarding the current design and operation of the deviation pricing framework, including how deviations arise and their relationship to MOS.

Chapter 2 outlines the Australian Energy Market Commission's (AEMC or Commission) reasons for making the final rule.

Chapter 3 describes the issues raised by AEMO in relation to the proposed changes to the NGR, as well as the Commission's assessment of those issues.

Chapter 4 outlines the range of issues that the Commission took into consideration when assessing AEMO's rule change request.

Chapters 5 and 6 provide greater detail on some of the specific issues considered by the Commission.

1.1 AEMO's rule change request

On 16 July 2012, AEMO made a request to the AEMC to make a rule regarding deviation pricing and the settlement surplus and shortfall in the STTM.²

¹ For more detail, see AEMO, *STTM Operational Review and Demand Hubs Review - Final Report*, 30 March 2012. Available on AEMO's website www.aemo.com.au

² AEMO's rule change request is available on the AEMC's website, www.aemc.gov.au.

1.2 Rationale for rule change request

The rule change request sought to amend or remove specific provisions in the NGR that govern deviation pricing and the settlement surplus and shortfall in the STTM in all STTM hubs. The purpose of the amendments was to better align the costs incurred by trading participants who deviate from their daily gas market schedule with the prices that are charged by the market, or paid by AEMO, in relation to their deviations.

The amendments to the NGR were intended to strengthen the "causer pays"³ principles supporting the deviation pricing framework.

AEMO envisaged that to give full effect to this principle, it would be required to undertake further consequent changes to the Procedures.

In their rule change request, AEMO considered that two key issues arise under the current requirements set out in the NGR, as outlined below.

1. Poor alignment between the cost of MOS and the price paid or charged for the deviations causing MOS

Under the current arrangements⁴, a disparity arises in the STTM between the costs incurred due to trading participants' deviating from their daily gas market schedule, and the prices they are charged, or paid, to cover those deviations. This disparity creates a large monthly settlement imbalance in the market, which is funded through shortfall charges, or less frequently, surplus payments. These charges and payments are levied on, and paid by, trading participants.

This means that trading participants who caused the need to balance the market with MOS on a day do not directly fund it, exposing other trading participants to financial risk, who may not have participated in the market on that day. In analysis conducted as part of their STTM review, AEMO noted that, on average, deviation payments and charges only recovered 20 - 30 per cent of MOS costs with the balance needing to be funded by trading participants through settlement shortfall charges.⁵

2. Risks in the market due to the magnitude of the market imbalance (settlement surplus or shortfall)

The large settlement shortfall each month, which must be recovered from trading participants, means that the risks associated with trading participants deviating from their daily gas market schedule may be difficult to manage. This is because the

³ The term "causer pays" refers to the economic principle that describes an approach to allocating costs. Under the causer pays principle, costs are allocated to parties that caused the cost in the first instance. This approach is considered to result in an efficient and equitable allocation of costs, and therefore, efficient market outcomes.

⁴ These arrangements will be in place until the final rule commences on 1 May 2014, which is attached to this final rule determination.

⁵ AEMO rule change request, page 7.

majority of the costs arising from a trading participant's deviation is not completely known until after the end of the month.

To support this argument, AEMO provided an example of this issue occurring in the STTM when, in 2010, trading participants raised the issue of the level of risk exposure that existed in the distribution of the settlement surplus or shortfall.

Following two high price events at the Sydney hub, concerns were noted relating to how deviations that were incurred long after the high price days in question could lead to very large changes in a trading participant's prudential exposure. A number of call events on trading participants were observed in relation to deviations on days where gas prices and MOS costs were low, due to trading participants' exposure to large shortfall charges caused by high prices or high MOS costs occurring earlier in the month.

This risk was seen as difficult to manage, particularly for trading participants who operated intermittently, entered the market mid-month, or for those who did not deviate on the high price days in question. AEMO considered that this risk, created by the settlement of the surplus or shortfall, was a potential barrier to market entry for new entrants in the STTM.⁶

1.3 Solution proposed in the rule change request

In response to the issues identified through the STTM review, and outlined above, AEMO proposed a number of changes to the NGR. The amendments were intended to better facilitate and strengthen the causer pays principle in relation to deviation pricing, and also facilitate AEMO's envisaged changes to the Procedures.

AEMO proposed the following amendments to the NGR:⁷

- Amending the definition of "deviation payment" in rule 364 to reflect that decrease MOS can either result in income to the market, or cause a cost to the market. AEMO proposed that the definition should provide that a deviation payment can not only be a payment by AEMO to a trading participant, but also a payment by a trading participant to AEMO.
- Amending the definition of "deviation charge" to make it consistent with the above proposed change to the definition of "deviation payment".
- Amending the definition of the "minimum market price" (MMP) to clarify that deviation changes and deviation payments were not subject to the MMP and could, therefore, be negative.
- Amending the definition of the "market price cap" (MPC) for consistency with the proposed change to the MMP.

⁶ AEMO rule change request, page 7.

⁷ AEMO rule change request, page 12.

- Removing the definition of “settlement surplus cap” from the NGR, so that there is no longer any cap on settlement surplus payments.
- Amending rule 405 to clarify that the MMP and MPC only apply to price steps used in ex ante and ex post scheduling, and to ensure that they are not directly applied to deviation prices.
- Amending rule 461 for consistency with the proposed changes to the definitions of “deviation charges” and “deviation payments”.
- Removing rule 462, which sets out the graduated deviation parameters, which AEMO claimed are not operating effectively in recovering the costs associated with providing MOS for trading participants.
- Removing rule 489, which required AEMO to undertake a review of the STTM operation, as that review has been completed.

1.4 Relevant Background

1.4.1 The Short Term Trading Market

The STTM is a "day ahead" market, whereby gas is traded a day before the actual gas day. This means that relevant activities take place before (ex ante), on (intra) and after (ex post) each individual "gas day", which is the day for which gas is scheduled to be transported to a hub.

On the day before any gas day, pipeline operators submit pipeline capacity information to AEMO, who publishes this data. STTM users and shippers can then place "bids" to buy quantities of gas at the hub, and STTM shippers can place "offers" to sell quantities of gas to the hub.

On the basis of this information, AEMO matches offers and bids, determines the ex ante market price and draws up the initial market schedules for the flow of gas to, and from, the hub on the gas day. All the gas that is supplied and withdrawn, according to the market schedule, is settled at the ex ante market price.

The market schedule is published by AEMO approximately 18 hours ahead of the gas day so that shippers can use this information to nominate the quantity of gas they require to be transported by each pipeline operator (a process which occurs outside of the STTM). Pipeline operators then prepare pipeline allocation schedules, detailing the quantities of gas to be delivered to each shipper on each pipeline on the gas day.

On the gas day, shippers supply gas to the hub, and users withdraw gas from the hub.

1.4.2 Deviations, market operator service and deviation pricing

Typically, the amount of gas that shippers and users actually supply to, or withdraw from, an STTM hub on a gas day is different to the amount of gas they nominated in

advance. This happens when, for example, end-user gas demand is higher than forecast.

The design of the STTM encourages trading participants to communicate these anticipated differences in gas demand in a transparent manner. This assists AEMO to balance the gas supply and, therefore, minimise system costs for balancing the market and maintaining the integrity of the system.

Shippers and users can submit equally offsetting market schedule variations (MSVs) transactions to AEMO for additional (or less) gas bought (or sold) than scheduled. By submitting an MSV, a trading participant's market schedule is modified so that it better aligns with its actual allocation on a gas day.

If, after having submitted any MSVs, there is still a difference between a trading participant's modified market schedule quantity and actual allocated quantity, this difference is referred to as a "deviation". Deviations from nominated schedules generally incur a financial penalty. This recognises that deviations (which results in MOS) can incur a cost to the market that must be recovered from trading participants.

To facilitate the settlement process, pipeline operators for each STTM facility provide AEMO with final pipeline allocation data after each gas day, detailing the amount of gas actually allocated to each shipper on their respective pipelines.

1.4.3 Deviation charges and payments⁸

Deviation quantities

A trading participant's deviation quantity is the difference between its gas market schedule (or modified gas market schedule) and the quantity of gas allocated to it at the end of each gas day.

A deviation quantity can be either "long" or "short".⁹

- For a **shipper** who supplies gas to the hub, a long deviation means that it delivered more gas to the hub than scheduled. A short deviation means the actual quantity of gas it delivered was less than its market schedule.
- For a **user or shipper** 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.

⁸ AEMO intends to amend the way in which deviation charges and deviation payments are calculated through its Procedures change process. These new arrangements will need to be in place by the commencement date of the final rule, on 1 May 2014, which is attached to this final rule determination. More information on how AEMO proposes to amend deviation charges and deviation payments is detailed in sections 1.3 and 3.1.

⁹ NGR, rule 364.

Short deviations lead to additional gas being required at the hub, while long deviations lead to excess gas having to be sold back to the market.

Overview of deviation charges and deviation payments

If a trading participant has a short deviation, it must *pay* a "deviation charge" to AEMO. This deviation charge is effectively a payment by the trading participant to cover the purchase of additional gas that was required to cover its deviation quantity.

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

As part of the settlement process, AEMO calculates, for each gas day, the deviation charges payable by, or deviation payments payable to, each trading participant at a hub.¹⁰

Details on how deviation charges and deviation payments are calculated are set out in the Procedures.¹¹

Graduated deviation parameters

Currently, the NGR requires that, when AEMO calculate deviation charges and deviation payments, it applies the graduated deviation parameters set out in rule 462 of the NGR. The graduated deviation parameters are provided below.

Figure 1.1 **Graduated deviation parameters**

Deviation percentage range	Factor
> +10%	90%
> +5% and ≤ +10%	95%
≥ -5% and ≤ +5%	100%
≥ -10% and ≤ -5%	105%
< -10%	110%

Deviation quantity range	Factor
> +1,200 GJ	90%
> +600 GJ and ≤ +1,200 GJ	95%
≥ -600 GJ and ≤ +600 GJ	100%
≥ -1,200 GJ and ≤ -600 GJ	105%
< -1,200 GJ	110%

¹⁰ NGR, rule 461(2)(g).

The tables set out two different types of methods for calculating deviation prices:

- the "percentage method", where the deviation is calculated as a percentage of the market schedule (or modified market schedule) quantity, as shown in the first table; and
- the "quantity method", where the deviation is measured in volume (GJ) terms, as shown in the second table.

The graduated deviation parameters are used to determine an "adjusted ex ante market price" that is used in the calculation of deviation charges or deviation payments. For example, a short deviation of more than 10 per cent will mean the ex ante market price will be upwardly adjusted by a rate of 110 per cent (i.e. increased by 10 per cent) if the percentage method applies. AEMO calculates deviation prices based on both the percentage method and the quantity method, and uses the method that best advantages the trading participant.

Calculation of deviation charges and deviation payments

Short deviations, which result in a deviation charge payable by a trading participant to AEMO, are currently calculated using the highest of:

- the adjusted ex ante market price;
- the ex post imbalance price;¹² and
- the high contingency gas price (if applicable).¹³

In the current Procedures, the calculation of deviation charges are capped by the MPC, which is the maximum price for natural gas traded at a hub for a gas day. The MPC is set in the NGR at \$400/GJ.

For a long deviation, the deviation payment payable by AEMO to a trading participant is calculated using the lowest of:

- the adjusted ex ante market price;
- the ex post imbalance price; and
- the low contingency gas price (if applicable).¹⁴

¹¹ See STTM Procedures, section 10.8. Available on AEMO's website.

¹² The ex post imbalance price is calculated the day after each gas day and is intended to represent the price that would have been set if trading participants had accurately forecast their gas schedules. In other words, it is the market price which is adjusted for changes in supply and demand that occurred since publication of the ex ante market schedules.

¹³ Contingency gas is a mechanism for balancing supply and withdrawals at a hub when other mechanisms (including market operator service) are unable to do so. A "high" contingency gas price is paid to contingency gas providers whose gas increases supply and/or reduces withdrawals. This price is set at the offer price of the most expensive contingency gas provider who is called.

In the current Procedures, the calculation of deviation payments cannot be lower than the MMP, which is the minimum price for natural gas traded at a hub for a gas day. The MMP is currently set at \$0/GJ in the NGR.

This deviation pricing framework means that trading participants with deviations effectively face a penalty for deviations from their daily gas market schedules because they are paying, or are being paid, a price that is generally less favourable to them than the ex ante market price that would have applied had they not deviated.

1.4.4 Pipeline deviations and the market operator service

Ideally, the total quantity of gas nominated (including intra-day re-nominations¹⁵) by shippers to the STTM pipeline operator for delivery to a hub on a gas day would match the actual quantity of gas delivered to the hub by that pipeline on that day. If this is not the case, the result is a "pipeline deviation".

Pipeline deviations are determined on the basis of actual flow data that pipeline operators measure for each pipeline after each gas day. A "positive" pipeline deviation means more gas was delivered to the hub than nominated, while a "negative" pipeline deviation means less gas was delivered to the hub than nominated.

If there is a pipeline deviation, the gas that is necessary to balance that deviation is provided (or withdrawn) by MOS.¹⁶

Under the current arrangements,¹⁷ MOS can be supplied by shippers who hold a contract with an STTM facility operator that entitles the shipper to either withdraw (loan) gas from the facility, or store (park) gas on the facility. These shippers are referred to as "eligible contract holders".¹⁸

MOS is managed by AEMO. Currently, at quarterly intervals during the year, AEMO invites eligible contract holders to submit price-quantity offers for the provision of MOS (the MOS service price) for the next quarterly "MOS period". AEMO lists the

14 A "low" contingency gas price is paid by contingency gas providers whose gas decreases supply or increases withdrawals. This price is set at the price bid of the least expensive contingency gas provider called.

15 Individual shippers may make "intra-day" re-nominations with the relevant pipeline operator for additional or less gas. These re-nominations, if accepted by the pipeline operator, will result in adjustments to pipeline allocation schedules.

16 MOS is defined as "the market operator service by which capacity (in GJ) is provided to balance pipeline deviations by increasing or decreasing the quantity of natural gas supplied to or withdrawn from a hub using an STTM pipeline." See NGR, rule 364

17 The Commission has made a final rule determination with respect to the eligibility requirements for MOS providers, and has determined to broaden the eligibility requirements to include any shipper that holds an underlying agreement with an eligible contract holder that allows this to occur. The final rule determination also reduces the length of the MOS period from a three month to one month MOS period. The new arrangements are due to commence on 1 April 2014. See the AEMC website for *Market Operator Service – Eligibility and Timing, final rule determination*, GRC0016, published 23 May 2013.

18 NGR, rules 364 and 399.

various offers from lowest to highest price and generates a "MOS stack" accordingly.¹⁹ MOS offer prices are capped by the MOS cost cap, defined in the NGR, which is the maximum MOS price for a MOS increase offer or a MOS decrease offer that AEMO may include in a MOS stack (being \$50/GJ).²⁰

Separate stacks are published for "increase MOS" (where additional gas needs to be delivered to the hub) and "decrease MOS" (where excess gas needs to be withdrawn from the hub).

In addition to the MOS service price, AEMO pays or charges the MOS provider the "MOS commodity charge" for the physical volume of MOS gas supplied or withdrawn on the gas day. The MOS commodity charge is set equal to the ex ante market price that applies two days after the relevant gas day.

1.4.5 The relationship between MOS and deviations

If changes in demand and supply of gas on a particular gas day are communicated to the market by trading participants in a precise and transparent way, MSVs will account for the increased or decreased gas traded between shippers and users.²¹

Changes in quantities that are not accounted for by MSVs will result in deviation quantities, which attract deviation penalties. These same deviation quantities will have to be offset by the provision of MOS gas if they are not re-nominated by shippers to pipeline operators.

The relationship between deviations and MOS can be summarised as follows:

- Increase MOS will be provided where the net deviations on a pipeline are short (negative). AEMO must pay the MOS provider for the provision of increase MOS. AEMO charges trading participants deviation charges for short deviations. The income AEMO collects from deviation charges should ideally offset at least some of the costs incurred by AEMO relating to the provision of increase MOS.
- Decrease MOS will be provided where the net deviations on a pipeline are long (positive). AEMO will be paid the MOS commodity charge by the MOS provider for decrease MOS. AEMO pays trading participants deviation payments for long deviations. The income AEMO collects from MOS commodity charges should ideally offset at least some of the costs incurred by AEMO relating to the provision of decrease MOS.

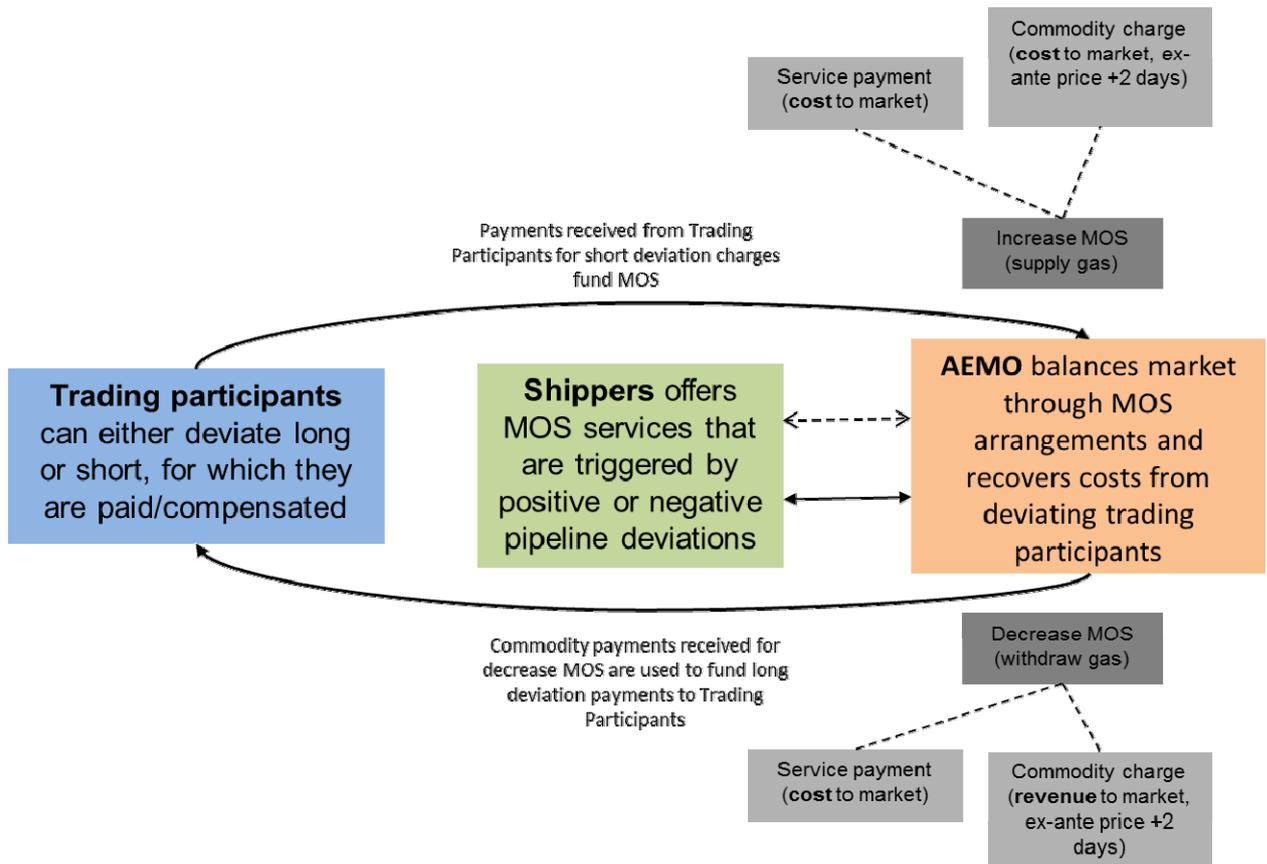
The general relationship between trading participants' deviations, pipeline deviations and MOS is illustrated in Figure 1.2.

¹⁹ See STTM Procedures, sections 5.5.1 and 5.5.2.

²⁰ See definitions set out in rule 364 of the NGR.

²¹ Intra-day shipper re-nominations with pipeline operators will reflect these same changes at the pipeline allocation level.

Figure 1.2 Relationship between deviations and MOS



Under the current arrangements, the total amount charged by AEMO for trading participants' deviations from their daily gas market schedules generally does not match the total amount paid by AEMO for MOS. The difference between these payments and charges is recovered through the monthly settlement process.

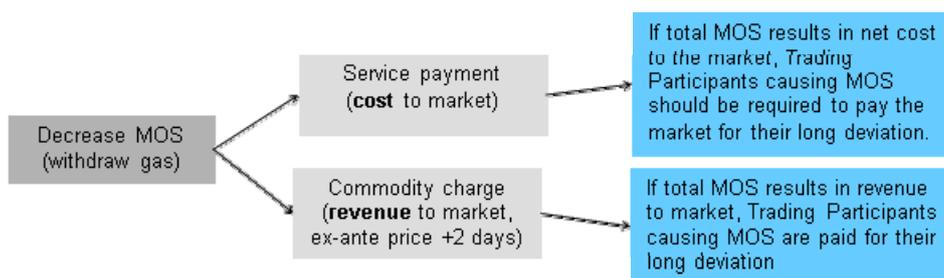
Decrease MOS and market revenue²²

In specific circumstances, decrease MOS can impose a cost to the market which, under the current arrangements, cannot be recovered from trading participants. This circumstance arises when the commodity charge paid to AEMO, by a MOS provider, is less than the MOS service charge that AEMO pays the MOS provider. Put another way, if the value of the service component is more than the value of the commodity component, the market incurs a cost in providing decrease MOS.

Under the current arrangements, the deviation payments paid to trading participants cannot be less than \$0/GJ (i.e. allowed to be negative) as they are capped by the MMP. This relationship is illustrated in Figure 1.3 below.

²² Note that the final rule, which is attached to this final rule determination, amends the arrangements described in this section. See Chapter 3 for further detail.

Figure 1.3 Decrease MOS relationship to market revenue and costs



1.4.6 Monthly settlement surplus and shortfall

AEMO performs calculations in order to settle the market for each individual gas day and invoices trading participants on a monthly basis.

Under the current arrangements, settlement of any particular gas day may be made up of payments to trading participants by AEMO and charges paid by trading participants to AEMO. These payments and charges result primarily from trading participants' deviations from their daily gas market schedules and MOS provision, but may also include charges for MSVs and the provision of contingency gas (if needed).

Overall, these payments and charges typically do not match, leading to either a settlement surplus (over-collection) or a settlement shortfall (under-collection).

Over a monthly billing period, AEMO accumulates the daily settlement surpluses and shortfalls at a hub and distributes the net settlement surplus or shortfall to trading participants at the end of the month. This is to ensure that over each month, the total market revenue balances the total market expenses caused by trading participants' deviations and MOS provision.

In the case of a settlement shortfall, the additional funds that are needed to balance the settlement are collected from the trading participants who have deviated, on the basis of their share of all deviations over that month.

Under the current arrangements,²³ in the case of a settlement surplus, the excess funds will be re-distributed to trading participants in two stages:

- First, surplus funds are re-distributed to trading participants who have deviated, based on their share of all deviations over a month. However, because the NGR currently contains a "settlement surplus cap", which is applied in the Procedures, this surplus payment amount is capped at \$0.14/GJ.²⁴ This cap was designed to prevent trading participants recovering a large proportion of their deviation charges through the monthly settlement process, which could reduce their incentive to not deviate.

²³ Note that the final rule, which is attached to this final rule determination, amends how surplus funds are re-distributed to trading participants. See Chapter 3 for further detail.

²⁴ NGR, rule 364.

- Secondly, the excess funds that remain after the settlement surplus cap is reached are re-distributed to all trading participants, based on their proportional share of the month's withdrawals at the hub. This means that trading participants who did not contribute to the over-collection of funds during the month may also share in the re-distribution of excess funds.

1.5 Commencement of rule making process

On 8 November 2012, the Commission published a notice under section 303 of the National Gas Law (NGL) advising of its intention to commence the rule making process and the first round of consultation with respect of the rule change request. An AEMC consultation paper identifying specific issues and questions for consultation was also published with the rule change request.

Due to the complexity of the issues raised by the rule change request, in particular, issues associated with removing the graduated deviation parameters from the NGR, the Commission extended the period of time for the draft rule determination to 28 March 2013 under section 317 of the NGR.

The Commission received four submissions on the rule change request as part of the first round of consultation. They are available on the AEMC's website.²⁵ A summary of the issues raised in the submissions, and the Commission's response to each issue, is contained in Appendix A.

1.6 Publication of draft rule determination and draft rule

On 28 March 2013, the Commission published a notice under section 308 of the NGL to make a draft rule determination in relation to the rule proposed by AEMO. The draft rule determination included a draft rule.

The closing date for submissions on the draft rule determination was 9 May 2013. The Commission received one submission in response to the draft rule determination. It is available on the AEMC's website. A summary of the issues raised in the submission, and the Commission's response to each issue, is contained in Appendix B.

²⁵ www.aemc.gov.au

2 Final rule determination

2.1 Commission's final rule determination

In accordance with section 311 of the NGL, the Commission has made this final rule determination in relation to the rule proposed by AEMO. In accordance with section 313 of the NGL, the Commission has determined to make a final rule, which is a more preferable rule, to that proposed by AEMO. The final rule adopts substantive elements of the rule proposed by AEMO.

The National Gas Amendment (STTM deviations and the settlement surplus and shortfall) Rule 2013 No 4 (final rule) is published with this final rule determination.

The final rule commences on 1 May 2014 to accommodate AEMO's implementation tasks, including Procedures and IT system changes.

The Commission's reasons for making this final rule determination are set out in Chapter 3.

2.2 Commission's considerations

In assessing the rule change request, the Commission considered:

- the Commission's powers under the NGL to make the rule;
- the rule change request;
- stakeholder submissions received during the first and second round consultation; and
- the Commission's analysis as to the ways in which the proposed rule will, or is likely to, contribute to the National Gas Objective (NGO).

There is no relevant Ministerial Council on Energy (MCE) Statement of Policy Principles relating to this rule change request.²⁶

2.3 Commission's power to make the rule

The Commission is satisfied that the final rule falls within the subject matter about which the Commission may make rules.

The rule falls within section 74 of the NGL. More specifically, it relates to:

²⁶ Under section 73 of the NGL, the AEMC must have regard to any relevant MCE Statement of Policy Principles in making a rule.

- the operation of a Short Term Trading Market of an adoptive jurisdiction (s.74(1)(a)(va)); and
- the activities of Registered Participants, users, end users and other persons in a regulated gas market (s.74(1)(a)(vi)).

2.4 Rule making test

Under section 291(1) of the NGL, the Commission may only make a rule if it is satisfied that the rule will, or is likely to, contribute to the achievement of the NGO. This is the decision making framework that the Commission must apply.

The NGO is set out in section 23 of the NGL as follows:

“The objective of this Law is 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 Commission considers that the relevant aspect of the NGO for this rule change request is the efficient operation of, and efficient investment in, natural gas services for the long term interest of consumers of natural gas with respect to price.²⁷

The Commission is satisfied that the final rule will, or is likely to, contribute to the achievement of the NGO by:

- *Reducing the financial risks of participating in STTM - potentially lowering barriers to entry for STTM trading participants and, thereby, enhancing the efficient operation of natural gas services. Lower financial risks may facilitate lower end-use gas prices.*

The final rule may reduce the financial risks of participating in the STTM by strengthening the causer pays principle in the deviation pricing framework. The causer pays principle, in this context, seeks to equitably and efficiently allocate MOS costs to the parties that caused the need for MOS. Allocating costs in this way helps to achieve efficient market outcomes, which is a principle consistent with the NGO.

Chiefly, the causer pays principle is strengthened by clarifying that the MMP and MPC do not apply to the calculation of deviation charges and deviation payments, which could otherwise prevent deviation payments to be negative. This change will allow long deviation payments to become negative and, in turn, allows trading participants to pay AEMO for negative long deviation payments. This will have the effect of more closely linking MOS costs to the trading participant(s) that was responsible for causing MOS on a gas day.

²⁷ Under section 291(2), for the purposes of section 291(1) the AEMC may give such weight to any aspect of the NGO as it considers appropriate in all circumstances, having regard to any relevant MCE Statement of Policy Principles.

Allowing negative long deviation payments is also likely to subsequently result in a reduction in the magnitude of the settlement shortfall or surplus, which is determined at the end of each month. This is because trading participants that cause decrease MOS will be more directly accountable for those costs, instead of them accruing to the monthly settlement surplus.

Further, under the final rule, if a settlement surplus arises, then funds would be re-distributed to trading participants based on their share of deviations for that month, and not their share of withdrawals from the hub.

Strengthening the causer pays principle in this way is likely to benefit trading participants as they are less likely to be exposed to MOS costs they had no involvement in generating. This is particularly the case if there had been events during the month preceding settlement where MOS costs had been high as a result of deviations, but a trading participant was not involved in, or contributed to, those deviations. This is an important factor for trading participants, as it reduces the financial risks of participating in the STTM and potentially lowers barriers to entry.

The final rule may contribute to the efficient operation of the STTM and the use of natural gas services, as it more effectively promotes the causer pays principle, and reduces the administrative burden on AEMO and trading participants of balancing the STTM, and recovering costs associated with the large monthly settlement shortfalls typically experienced in STTM hubs.

- *Improving price signals regarding the value of MOS services - potentially resulting in STTM trading participants being able to better ascertain the costs of deviating from their daily gas market schedule and, therefore more efficiently utilise natural gas services. The efficient utilisation of natural gas services may facilitate lower end-use gas prices.*

Clarifying that the MMP and MPC do not apply to deviation charges and deviation payments, and thereby allowing deviation payments to be negative, recognises that there are costs associated with deviating from daily gas market schedules and therefore, balancing the gas market. Applying the causer pays principle in this way improves price signals in the STTM regarding MOS costs and, therefore, the costs of deviating from daily gas market schedules.

The new arrangements will potentially enable trading participants to make more informed decisions regarding the value derived from a service (gas) against the market cost (MOS) of providing that service.

Improving price signals in this way is likely to lead to a more efficient utilisation of natural gas services, as trading participants can make more informed choices as to the true costs and benefits of deviating from their daily gas market schedules.

Under section 295(4) of the NGL, the Commission may only make a rule that has effect with respect to an adoptive jurisdiction if it is satisfied that the final rule is compatible with the proper performance of AEMO's declared network functions. The final rule is compatible with AEMO's declared network functions because it has no impact on them.

2.5 More preferable rule

Under section 296 of the NGL, the AEMC may make a rule that is different (including materially different) from a market initiated proposed rule (a more preferable rule) if the AEMC is satisfied that, having regard to the issue or issues that were raised by the market initiated proposed rule (to which the more preferable rule relates), the more preferable rule will, or is likely to, better contribute to the achievement of the NGO.

Having regard to the issues raised by AEMO's rule change request, the Commission is satisfied that the final rule will, or is likely to, better contribute to the NGO for the following reasons:

- *Providing regulatory certainty to trading participants and the market that any future amendments to the deviation pricing framework will have regard to economic efficiency objectives, by efficiently allocating the risks associated with deviating from daily gas schedules and the consequences to the STTM.*

The final rule removes rule 462, which contains the graduated deviation parameters, and which is currently the only provision in the NGR that governs how deviation charges and deviation payments are calculated. In the absence of that rule, the NGR would simply provide that deviation payments and deviation charges are to be determined by AEMO for each gas day in accordance with the Procedures.

Deviation pricing is an important aspect of the STTM market design, and it is therefore important that the NGR provides some guidance when developing deviation payments and deviation charges. The final rule achieves this by creating a set of principles for the calculation of deviation payments and deviation charges which promote:

- the economically efficient operation of the STTM by efficiently allocating the risks associated with deviating from daily gas schedules amongst trading participants;
- deviation charges and deviation payments that reflect the costs of providing MOS to the market, and which minimise the magnitude of the settlement shortfall or surplus; and
- deviation charges and deviation payments being allocated to trading participants on a causer pays basis.

Each of these objectives, outlined as principles for inclusion and/or parameters in the NGR, are likely to contribute to the efficient operation and use of natural gas services. This is achieved by ensuring that any future changes to the deviation pricing framework are conducted in a manner that is consistent with the causer pays principle and potentially reduces the financial risks faced by trading participants operating in the STTM.

3 Commission's reasons

The Commission has analysed the rule change request and assessed the issues arising from it. For the reasons set out below, the Commission has determined that a rule be made. The Commission's analysis of the proposed rule is also set out below.

3.1 Assessment of issues

AEMO Proposal

AEMO proposed modifying the deviation pricing framework in order to better align the cost to the market of a deviation (i.e. the costs of supplying MOS) with the charge or payment associated with that deviation. In other words, AEMO was seeking to strengthen the causer pays principle in the deviation pricing framework.

AEMO proposed that this could be achieved through a combination of changes to the Procedures and the NGR.

With regard to the Procedures, AEMO proposes to strengthen the causer pays principle by introducing the average cost of MOS (per GJ) incurred for a gas day into the set of calculations used to determine deviation payments and deviation charges. This change would mean that:

- The deviation charge for a short deviation would be the maximum of:
 - the ex ante market price;
 - the ex post imbalance price;
 - the average increase MOS cost; and
 - the high contingency price (if called).
- The deviation payment for a long deviation would be the minimum of:
 - the ex ante market price;
 - the ex post imbalance price;
 - the average decrease MOS cost; and
 - the low contingency price (if called).

AEMO expect that this change to the deviation pricing framework would reduce the magnitude of the settlement shortfall by up to 80 per cent. It would also better assign the cost of MOS to trading participants who caused it on a particular gas day, rather than leaving it to the monthly settlement surplus or shortfall.

With regard to the NGR, AEMO considered the following amendments were required to give full effect to strengthening the causer pays principle supporting the deviation pricing framework. The reasons for this are discussed below.

Amending the definitions of MMP, MPC, as well as deviation payments and deviation charges

AEMO sought to clarify that the MMP and MPC do not apply to the application of deviation pricing.²⁸ Under the current arrangements, the MMP is defined by the NGR as the "minimum market price for natural gas traded at a hub for a gas day, being \$0/GJ".²⁹ AEMO considered that the MMP should not apply to deviation charges or deviation payments, as those prices do not relate to prices for gas traded in the market. Clarifying the definition of MMP (to remove any suggestion of its application to the calculation of deviation charges or deviation payments) would allow deviation payments to be negative.

In order to permit negative deviation payments to be made, AEMO also sought to amend the definition of "deviation payment". Under the current arrangements, a "deviation payment" is defined as "an amount payable by AEMO to a Trading Participant in respect of a long deviation quantity".³⁰ AEMO proposed that this definition should be changed to reflect that a deviation payment may not only result in a payment to a trading participant by AEMO, but may also result in a payment by a deviating trading participant to AEMO.

In order to be able to assign the full cost of decrease MOS to trading participants with long deviations, the price for a long deviation needs to be allowed to be negative. A negative deviation payment would mean that the party that deviated would pay AEMO, rather than be paid by AEMO. AEMO considered that this would result in better causer pays deviation pricing.

For reasons of consistency, AEMO also proposed similar amendments to the definition of the "MPC" and "deviation charge".

Deleting the settlement surplus cap, currently set at \$0.14/GJ

AEMO proposed that reference to the settlement surplus cap of \$0.14/GJ be deleted from the NGR.³¹ AEMO expect that by implementing their currently envisaged Procedures changes for the deviation pricing framework, the amount it will need to recover from deviation charges and deviation payments over a month is likely to exceed the cost of the MOS that was caused by those deviations, resulting in a settlement surplus for most months.

Having a surplus cap in place would mean that over-recovered MOS costs would be returned, in part, to the trading participants with the greatest share of a month's

28 AEMO rule change request, page 10

29 NGR, rule 364

30 NGR, rule 364

31 AEMO rule change request, page 11.

withdrawals, rather than to those trading participants that funded the surplus. Removing the surplus cap would allow over-recovered MOS costs to be returned solely to those parties that paid deviation prices that funded the surplus.

Graduated deviation parameters

AEMO argued that the graduated deviation parameters discouraged trading participants from bringing additional gas to the market on a day when the market is likely to be short, and instead encouraged reliance on MOS for balancing the market. This is because the graduated deviation parameters penalise all trading participants that deviate by more than a specified percentage or GJ quantity.³²

AEMO also considered that, in some circumstances, allowing trading participants to deviate from their daily gas market schedules would actually assist the market. This is because in some circumstances, deviating reduced the amount of MOS required in the market and, consequently, the party that deviated should not be penalised for doing so. For example, if there is an overall short deviation at a hub, any party that deviated long would reduce the amount of MOS required to balance the hub and, therefore, reduce costs to the market.

3.2 Assessment of proposed rule

The Commission has assessed the issues raised by the rule change request. The Commission notes that the amendments proposed by AEMO would enable them to undertake their envisaged changes to the Procedures with a view to correcting a misalignment between costs to the market resulting from MOS, and revenue to the market from deviation charges and deviation payments.

The Commission considered that the proposed changes to the NGR should be assessed on their own merits, and independently of any envisaged changes to the deviation pricing framework that AEMO intends to introduce through their Procedures change process. Therefore, the Commission's assessment of the rule change proposal did not consider the details or merit of any envisaged Procedures changes proposed by AEMO and outlined in their rule change request.

Amending the MMP and MPC

The Commission agreed with AEMO that the causer pays principle could be strengthened by allowing long deviation payments to be negative, and paid to AEMO by trading participants. However, the Commission considered that it was preferable to achieve this outcome by including guidance in the NGR in relation to the calculation of deviation charges and deviation payments (the NGR requires these calculations to be set out in the Procedures) and by including a definition of "deviation price".

³² This penalty arises because the graduated deviation parameters are used by AEMO to calculate the adjusted ex ante price, which is one of the prices used by AEMO when calculating deviation charges and deviation payments under the Procedures. The result is that a trading participant who deviates will pay or receive a less favourable price for the gas than if it had accurately forecast gas schedules and paid the ex ante market price.

Together, these amendments should remove any impediments there may have been in the NGR from including calculations in the Procedures that would allow deviations payments to be negative.

The amendments to the MPC and MMP, as proposed by AEMO, could have potentially run the risk of causing ambiguity and confusion for how these market parameters were intended to operate and in their application to other rules, in particular, the application of MPC for an administered price cap state.

On this basis, the Commission also determined that amendments to rule 405, relating to the price of natural gas, were unnecessary.

Settlement surplus cap

The Commission considered that removing the settlement surplus cap would not impact trading participants' incentives to adhere to their daily gas market schedules. While surplus funds would effectively be returned to the trading participants that caused MOS, any incentive to deviate was likely to be counteracted by strengthening the causer pays principle in the deviation pricing framework, such as removing impediments to negative long deviations payments.

Graduated deviation parameters

The Commission considered the impact of removing the graduated deviation parameters from the NGR, and noted that, while the parameters were intended to apply an increasingly severe penalty the larger the deviation, this did not work in practice.

The Commission considered that the graduated deviation parameters:

- inefficiently allocated the risks, amongst trading participants, of deviating from their daily gas schedules; and
- created a settlement shortfall in most months, which must be recovered from STTM trading participants more broadly, thereby increasing the financial risks of participating in the STTM.

The Commission noted that removing the graduated deviation parameters would leave the NGR silent on the matter of how to calculate deviation charges and deviation payments. This is because all reference to deviation pricing in the NGR would be removed, meaning that, if the rule was deleted as proposed, the NGR would simply provide that deviation payments and deviation charges should be determined by AEMO for each gas day in accordance with the Procedures.

The Commission considered that deviation pricing is an important aspect of the market's design, as it is the means by which the costs associated with deviating from daily gas schedules are allocated and recovered amongst trading participants.

On that basis, the Commission considered that some guidance was required in the NGR regarding the deviation pricing framework, with the majority of the technical and

administrative detail to be contained in the Procedures. As such, it was appropriate for the NGR to contain a number of high level principles to guide AEMO in the development of deviation payments and deviation charges.

The Commission decided to include, as part of the final rule, a set of principles and parameters to be inserted into the NGR, which reflect those that were consulted upon in the draft rule determination. The principles are summarised in Box 3.1. Further consideration of the proposed principles, including issues raised by stakeholders, are addressed in Chapter 6.

Box 3.1: Deviation pricing framework principles

1. Deviation charges and payments should, to the extent practicable, be set to promote the economically efficient operation of the STTM by efficiently allocating the risks associated with trading participants deviating from their daily gas market schedules.
2. Deviation charges and deviation payments should, to the extent practicable, reflect the costs of providing MOS and minimise any settlement shortfall charge or settlement surplus payment.
3. When determining deviation charges and deviation payments:
 - (a) If an administered price cap state applies by reason of material involuntary curtailment, then deviation charges are priced at the administered price cap and deviation payments are priced at the ex ante market price for the gas day; and
 - (b) In all other cases, the maximum deviation price used to calculate a deviation charge must not exceed the sum of the MPC plus the MOS cost cap, and the minimum deviation price used to calculate a deviation payment must not be less than the sum of the MMP minus the MOS cost cap.
4. Any settlement shortfall charge or settlement surplus payment that occurs should be allocated to trading participants on the basis of their share of deviations.

Statutory review

The Commission decided to not amend the NGR to remove the statutory requirement on AEMO to undertake a review of the STTM (rule 489) as part of this rule change request.

The deletion of the rule was not necessary for, or consequential to, the request to make a rule. While the obligation under rule 489 is now spent and the provision is now redundant after the completion of the STTM review in March 2012, the Commission considered it was more appropriate to make this NGR amendment in the recent Minor

Change rule, which the AEMC undertakes to correct minor errors and make non-material changes to the NGR.³³

3.3 High level principles

In determining whether to include principles in the final rule, the Commission considered the appropriate role for each regulatory instrument, NGR and the Procedures, within the current energy market governance framework.

The Commission had previously considered this issue and in various contexts.³⁴

The Explanatory Material on the Draft Short Term Trading Market Rules provides a high level policy context as to the appropriate division of matters between the NGR and the Procedures for gas market arrangements.³⁵

“Under the conceptual framework for the STTM legislation the NGL will deal with a limited number of high level features of the regime, the NGR will contain the detail of the market operation and the STTM procedures will include the more detailed process requirements involved in NGR obligations and address lower level technical and administrative matters”

The following table elaborates on these principles as outlined in the Explanatory Material.³⁶

³³ The AEMC has made this amendment to the NGR through the Minor Rule Change 2013. See *Minor Rule Change 2013, final rule determination*, 30 May 2013. Available on the AEMC website.

³⁴ See AEMC, *Economic regulation of transmission services, final rule determination*, November 2006; AEMC *Short Term Trading Market - Market Schedule Variation, final rule determination*, October 2011; and AEMC *Market Service Operator - Timing and Eligibility, final rule determination*, 23 May 2013.

³⁵ See *Explanatory Material on the Draft Short Term Trading Market Rules*, 2009, page 2.

³⁶ See *Explanatory Material on the Draft Short Term Trading Market Rules*, 2009, page 2.

Figure 3.1 STTM regulatory frameworks

Instrument	Responsibility	Subject Matter
National Gas Law	Enacted by SA Parliament, as the lead legislator. Application Acts govern the extent to which the national gas legislation applies in the relevant jurisdiction.	The STTM will be authorised under the NGL, which will make high level provisions for: <ul style="list-style-type: none"> • STTM establishment; • the functions of AEMO in relation to the STTM; and • liabilities of AEMO and other participants (where appropriate) in relation to the STTM.
National Gas Rules	Made initially by the South Australian Minister, subject to MCE endorsement. Future amendments to be made by the Australian Energy Market Commission, in accordance with the rule change procedures outlined in the NGL.	The rules for the STTM will be incorporated in the NGR and will deal with issues such as registration, market operations, balancing arrangements via MOS, contingency gas and settlements.
STTM Procedures	Made by AEMO, in accordance with the NGL/NGR.	STTM Procedures will cover more detailed technical and administrative matters. The initial STTM Procedures will be developed and made by AEMO under the NGL. AEMO will then be able to amend STTM Procedures in accordance with the consultation process in the NGR.

These issues were also previously discussed by the AEMO Implementation Steering Committee (ISC) in the context of the transfer of the jurisdictional gas market rules to the national regulatory framework in 2009. The AEMO ISC proposed that the Procedures were more appropriate where the purpose is to provide for the "technical and procedural detail supporting the [day to day] operation of the gas market".³⁷

This issue was also reviewed by the Commission, in relation to the regulation of transmission services in the electricity market,³⁸ and by the Expert Panel on Energy Access Pricing in its report to the MCE.³⁹

The Expert Panel considered that "the rules should address matters that have industry wide application or effects that are likely to change relatively infrequently over time and that do not rely on an assessment of individual market participant conditions or circumstances".

The Expert Panel also noted that in some circumstances it may be appropriate for the rules to avoid a high degree of prescription to allow regulators, for example, the ability

³⁷ See Australian Energy Market Operator Establishment, *Legislative framework: statement of proposed approach*, August 2008.

³⁸ See AEMC, *Economic regulation of transmission services*, final rule determination, November 2006.

³⁹ See Expert Panel on Energy Access Pricing 2006, *Report to the Ministerial Council on Energy*, April 2006.

to accommodate particular circumstances of individual market participants in regulatory decisions.

Ultimately, the Expert Panel considered that these decisions were best made through the rule making process, which facilitates a full and transparent exchange of views and an approach tailored to meet the particular characteristics of each regulatory design issue.⁴⁰

The Commission also considered this advice when developing the principles and rules in relation to the Economic Regulation of Transmission Services rule change.

While these previous policy statements should be viewed in their context, they are nevertheless useful in informing the Commission's assessment approach. Taking them into account, the NGR may be viewed as more appropriate than the Procedures where the regulatory obligations:⁴¹

- impose (or impact on the) substantive rights, obligations and duties on (of) participants;
- potentially have significant financial implications for trading participants;
- have a significant impact on the economic efficiency of the market and market design;
- have effects that are likely to change relatively infrequently over time and be subject to limited exceptions; and
- have industry wide application or impact.

In regard to this rule change request, the Commission considered that these principles provided a good framework for considering where an obligation should sit in the regulatory and institutional framework, consistent with the current governance arrangements.

At the same time, however, each rule change request must be dealt with on a case by case basis and on its merits, for any particular circumstance that may apply. In addition, such principles should continue to be reviewed when necessary and in the context of a developing gas market.

⁴⁰ See Expert Panel on Energy Access Pricing 2006, *Report to the Ministerial Council on Energy*, April 2006, page 26.

⁴¹ This list is not exhaustive, and is derived from the discussion and principles set out separately by the AEMO ISC, as well as elements of the Expert Panel on Energy Access Pricing in its report to the Ministerial Council on Energy.

It is noted that the Commission has previously considered the principles outlined in this section as part of the assessment process for past rule change requests, where the appropriateness of the regulatory instrument (NGR or Procedures) has been tested.⁴²

3.4 Application of high level principles

In the context of this rule change request, and taking into account the high level principles outlined above, the Commission considered that the NGR should include principles to support a strengthened deviation pricing framework for the following reasons:

- Participation in the STTM by trading participants imposes certain obligations and liabilities with respect to MOS costs that are caused by deviations from their daily gas market schedule. The deviation pricing framework assists in clarifying the extent to which trading participants are required to fund the costs of MOS caused by their actions.
- Deviation prices financially impact on trading participants in the STTM. Therefore, the rules should contain a set of principles to guide AEMO's development of deviation prices to ensure that they meet economic efficiency objectives, and reduce the financial risks associated with participation in the STTM.
- The high level principles guiding the deviation pricing framework are unlikely to change frequently, and provide AEMO with sufficient flexibility to accommodate changing market conditions.
- Deviation pricing has the potential to impact on wider industry and the economy. For example, large industrial end-users may be impacted by deviation prices through their use of gas supplies and participation in the STTM.

3.5 Assessment of proposed rule

The Commission has determined to make a final rule that largely adopts the amendments proposed by AEMO in their rule change request, with the exception of the following amendments:

- Principles and parameters are included that are intended to guide AEMO in developing a deviation pricing framework under the Procedures, for reasons discussed in section 3.2.
- Including a definition of "deviation price", together with the above principles, removes any impediments there may have been in the NGR from allowing deviation payments to be determined as negative amounts.

⁴² See AEMC, *Economic regulation of transmission services*, final rule determination, November 2006; AEMC *Short Term Trading Market - Market Schedule Variation*, final rule determination, October 2011; and AEMC *Market Service Operator - Timing and Eligibility*, final rule determination, 23 May 2013.

- Not making the proposed amendments to rule 405 on the basis that, in light of the above, they are not necessary.
- The final rule does not seek to delete rule 489, which relates to AEMO's spent obligations to undertake a review of the STTM.

The policy position in the final rule determination is unchanged from the draft rule determination.

The final rule has been amended to include a minor clarification change regarding the high level principles noted in rule 462. The amendment clarifies that forecasting in the STTM specifically relates to efficiently allocating the risks associated with deviating from daily gas schedules amongst trading participants.

The final rule has also been amended to include a commencement date of 1 May 2014 to accommodate AEMO's implementation tasks, including Procedures and IT system changes. No transitional arrangements are required.

4 Commission's assessment approach

This chapter describes the assessment framework that the Commission applied to assess AEMO's rule change request in accordance with the requirements set out in the NGL (explained in Chapter 2).

The matters outlined below are considered in greater detail in the following Chapters 5 and 6.

4.1 Consideration of counterfactual arguments

In assessing any rule change request against the NGL criteria, the first step is to consider the counterfactual arrangements against which the rule change is being compared. In the present case, the counterfactual arrangements are:

- Deviation payments and deviation charges do not adequately reflect whether they are costs or income to the market, and deviation payments cannot be negative. This means that where MOS results in a cost to the market, AEMO is unable to recover these costs directly from the trading participants that caused the need for MOS, and would instead need to be recovered from all trading participants through the monthly settlement process.
- The settlement surplus is capped at \$0.14/GJ. This means that monthly settlement surpluses are redistributed to trading participants, after the cap has been reached, on the basis of their proportional share of withdrawals from the hub. The surplus cap is designed to maintain the incentive on trading participants to meet commitments made in their daily gas schedules by not fully returning funds to deviating parties.
- Keeping the graduated deviation parameters in the NGR is likely to result in AEMO recovering insufficient funds from trading participants for their deviations on a gas day. This is likely to continue to result in a settlement shortfall of up to 80 per cent each month, and potentially expose trading participants to unanticipated costs through the monthly settlement process.

4.2 Application of high level principles

The Commission considered the following relevant matters, as they related to the rule change request:

- the extent to which the proposed changes to the deviation pricing framework impact on the efficient operation of the market, and use of natural gas services in the STTM;
- the extent to which enhancing causer pays as a principle for inclusion in the NGR will lower barriers to entry for trading participants;

- the extent to which price certainty and clarity regarding deviation pricing will lower the financial risks of participating in the STTM for trading participants; and
- whether the proposed rule is consistent with the principles of good regulatory practice.

5 Efficient operation of the STTM

5.1 Rule proponent's view

AEMO proposed a number of amendments to the NGR to correct the misalignment between the cost of MOS and the price paid or charged for the deviations causing MOS. The proposed amendments to the NGR would also allow AEMO to undertake a broader set of changes to the Procedures to further support the causer pays principle.

AEMO proposed the following changes to the NGR:

- amending the definitions of the MMP, MPC, deviation charge and deviation payment;
- deleting the settlement surplus cap; and
- deleting the graduated deviation parameters.

The proposed amendments are intended to strengthen the causer pays principle in the deviation pricing framework. According to AEMO, this should broadly result in a reduction in the financial risks associated with participating in the STTM.

Overall, AEMO considered that their proposed amendments would reduce deviation pricing uncertainty in the STTM and provide stronger price signals and incentives in the market. AEMO considered that these changes would also promote the efficient use of natural gas services and the more efficient operation of the STTM.

5.2 Stakeholder views - consultation paper

Stanwell Corporation Limited

Stanwell Corporation Limited (Stanwell) was generally supportive of AEMO's proposal to strengthen the causer pays principles supporting the deviation pricing framework.⁴³

Stanwell considered that the causer pays principle would be most effective where there was also a corresponding change to the MOS period from a three monthly period to daily.⁴⁴ According to Stanwell, a daily MOS period would strengthen trading participants' ability to accurately forecasting gas schedules, and allow them to better manage their gas requirements on a daily basis, and therefore potential deviations from their daily gas market schedules.

⁴³ See AEMC website, Stanwell Corporation Limited, consultation paper submission, page 1.

⁴⁴ The MOS period was the subject of another rule change request being considered at the same time as this rule change proposal. See *Market Service Operator – Timing and Eligibility*, final rule determination, GRC0016, 23 May 2013, available on the AEMC website.

Stanwell supported the proposal to remove the settlement surplus cap, only if the MOS period was reduced to a daily period. According to Stanwell, forecasts provided by trading participants are undertaken in good faith, as per the NGR provision, and until such time as daily MOS is adopted, there is merit in maintaining the settlement surplus cap to ensure that the incentive on trading participants to accurately forecast gas schedules is not diminished.⁴⁵

Stanwell did not object to amendments to the definition of MMP, MPC, deviation payments and deviation charges, as proposed by AEMO.⁴⁶

Alinta Energy

Alinta Energy (Alinta) considered that AEMO's rule change proposal would be effective in better facilitating causer pays in relation to MOS costs in the STTM. Alinta supported the removal of the settlement surplus cap so that any over-recovery of funds from deviating trading participants could be redistributed to those trading participants, as opposed to being redistributed to trading participants based on their proportional share of withdrawals from the hub.⁴⁷

Alinta also supported AEMO's proposed amendments in relation to the definition of MMP, MPC, deviation charges and deviation payments. Specifically, Alinta considered that the proposed amendments were required to better enable the alignment of causer pays, and in particular, to enable negative deviation pricing to occur. However, on this issue, Alinta considered that the potential liabilities faced by trading participants should be bounded by the MPC and MMP via an explicit connection to MOS (n.b. this issue is addressed in greater detail in the next chapter regarding the removal of the graduated deviation parameters and the proposal to include high level principles and parameters).⁴⁸

Origin Energy

Origin Energy (Origin) strongly supported AEMO's rule change request to strengthen the causer pays principle in the STTM.⁴⁹

EnergyAustralia

EnergyAustralia supported all aspects of AEMO's rule change proposal and considered it a positive development. EnergyAustralia also noted that there might be other ways in which deviation pricing design might be altered to simplify it and improve its efficiency, although they did not outline how this may be achieved.⁵⁰

⁴⁵ See AEMC website, Stanwell Corporation Limited, consultation paper submission, page 2.

⁴⁶ See AEMC website, Stanwell Corporation Limited, consultation paper submission, page 3.

⁴⁷ See AEMC website, Alinta Energy, consultation paper submission, page 2

⁴⁸ See AEMC website, Alinta Energy, consultation paper submission, page 2

⁴⁹ See AEMC website, Origin Energy, consultation paper submission, page 1.

⁵⁰ See AEMC website, EnergyAustralia, consultation paper submission.

5.3 Stakeholder views - draft rule determination

One submission from Origin Energy was received in response to the draft rule determination, as detailed below.

Origin Energy

In their submission, Origin supported the principle of the rule change request, which is to strengthen the causer pays principles in the STTM. Origin also reiterated a number of points raised previously in their submission to the consultation paper that related, more broadly, to MOS pricing and deviations that arise due to non-market factors.

In their submission, Origin considered that further changes to MOS pricing could improve the causer pays principle by providing stronger pricing signals and incentives. Specifically, Origin considered that the MOS service payment should be valued at the marginal clearing price, rather than the pay-as-bid price, and the MOS commodity payment or charge should be set at the ex post imbalance price for the day.

The Commission considered this matter at the draft determination stage, and considered that it was not within the scope of the rule change request. This is because the intention of the rule change request was to specifically better align the prices paid or charged for deviations such that they facilitate the full recovery of MOS costs. That is to say, if there is a cost to providing MOS to the market, then it should be recovered by deviation payments, and in particular, from the trading participants that caused the need for MOS. The rule change request did not raise specific issues relating to how MOS in the STTM is priced or the economic costs that may be incurred in providing MOS by trading participants.

Origin also raised concern in their submission that the changes proposed by AEMO in the rule change request may heighten the financial impacts on trading participants should there be large deviations or scheduled MOS that is beyond their control. Origin identified the possibility of a market event that could give rise to large deviations for non-market reasons, such as a pipeline capacity error.

The Commission also considered this matter at the draft determination stage, and considered that it was not within the scope of the rule change request. As background, in February 2011, AEMO submitted a rule change request to the AEMC concerning pipeline data errors. The key purpose of that rule change request was to provide AEMO with more time to review and confirm the accuracy of STTM information to reduce the risk of errors in the setting of STTM schedules and prices. The AEMC completed the rule change in May 2011.⁵¹ The Commission understands that since the making of the rule in May 2011, there have not been any material events regarding the accuracy of pipeline data and price setting in the STTM.

More detail regarding the Commission's response to the issues raised by Origin is provided in Appendix B.

⁵¹ See AEMC, *STTM Data Validation and Price Setting Process*, final rule determination, 5 May 2011.

5.4 Commission's analysis

The Commission considered that the changes proposed by AEMO were likely to result in a strengthening of the causer pays principle that supports the deviation pricing framework. Primarily, this could be achieved by allowing negative long deviation payments, and for trading participants to pay AEMO for those negative long deviations.

The Commission considered the extent to which changing the definition of MPC and MMP would help strengthen the causer pays principle. The amendments sought to remove any ambiguity that may arise whereby deviations were considered to form part of the natural gas traded at a hub.

Amending the definitions of MMP and MPC may provide greater clarity that they do not apply to deviation charges and deviation payments. However, there are broader implications to changing these definitions that may impact on the operation of other parts of the NGR relating to the cumulative price threshold, the administered price cap and the administered price cap state.

To that extent, and to give clarity to the intent of the policy, the Commission has created a definition for "deviation price" in the NGR and included principles and parameters for the calculation of deviation charges and deviation payments. Together, these amendments to the NGR should provide clarity that the MPC and the MMP do not apply to deviation prices, thereby allowing negative long deviation payments.

The Commission considered that allowing negative long deviation payments should reduce the financial risks associated with participating in the STTM, as trading participants would be charged for their deviations on the gas day. Determining deviation charges and deviation payments in this manner was considered more efficient and likely to improve clarity and pricing certainty with regard to the costs associated with deviating from a daily gas market schedule.

The Commission considered that removing the settlement surplus cap from the NGR also had the potential to strengthen the causer pays principle. Removing the surplus cap would allow over-recovered MOS costs to be returned solely to the trading participants that the paid deviation prices that funded the surplus in the first place, and not be returned to all trading participants based on their share of withdrawals from the hub.

The Commission noted, however, that depending on the size of the settlement surplus, removing the settlement surplus cap may reduce the effect of the incentive on trading participants to not deviate from their daily gas schedules. This is because the effective penalty for deviating would be lower. However, AEMO could still potentially seek to include a settlement surplus cap through the Procedures change process if, in its view, its removal was perceived to be blunting the incentive to not deviate from daily gas schedules. Potentially re-introducing a settlement surplus cap would need to be consistent with the principles included in the final rule.

The Commission agreed with AEMO that the proposed changes were likely to lead to improved efficiency in the STTM. This change to the arrangements would potentially enable trading participants to make more informed decisions regarding the value derived from a service (gas) against the market cost (MOS) of providing that service. This is particularly the case where enhancements to the causer pays principles result in improved pricing clarity and, therefore, better utilisation and investment in natural gas services.

6 Pricing principles and obligations

6.1 Rule Proponent's view

In their rule change request, AEMO proposed deleting the graduated deviation parameters from the NGR. This is because, under their envisaged changes to the deviation pricing framework, which include introducing average MOS costs in the Procedures as part of the calculation to determine deviation prices, the parameters would no longer be required.

According to AEMO, the graduated deviation parameters did not recover sufficient income to fully offset the costs of providing MOS. This resulted in recurring monthly settlement shortfalls, which have needed to be recovered from trading participants through the monthly settlement process.

According to AEMO, the graduated deviation parameters had the effect of discouraging trading participants from bringing extra gas to the market on a day when the market is likely to be short. Instead, the existing arrangements have encouraged trading participants to rely on MOS to balance the market.

6.2 AEMC stakeholder consultation paper

At the commencement of the rule change process, the AEMC published a consultation paper⁵² outlining issues raised by the request. In the consultation paper, it was noted that the potential removal of the graduated deviation parameters would inadvertently result in the removal of the only reference in the NGR that governed how deviation charges and deviation payments were calculated. If rule 462 were to be deleted, as proposed by AEMO, the NGR would simply provide that deviation payments and deviation charges are to be determined by AEMO for each gas day in accordance with the Procedures.

Given that the deviation pricing framework is an important aspect of the market's design, the AEMC proposed including a set of principles in the NGR to guide AEMO in the development of deviation charges and deviation payments. This approach was considered appropriate as the content of any Procedure change would only be determined after a separate Procedures change process.

On that basis, a set of principles were included for consultation (as outlined earlier in section 3.2).

⁵² AEMC, *STTM deviation and the settlement surplus and shortfall*, consultation paper, November 2012.

6.3 Stakeholder views - consultation paper

EnergyAustralia

EnergyAustralia did not provide any specific comment on the proposed set of principles for inclusion in the NGR.

Origin Energy

Origin considered that it would be good practice for the NGR to outline the high level policy directions in relation to the deviation pricing framework, and for the Procedures to provide technical specifics to give effect to those policy directions. To that extent, Origin considered it appropriate for the NGR to provide some guidance as to how AEMO develops its deviation pricing framework, while the Procedures detail how the deviation charges and deviation payments are calculated.⁵³

Origin considered that the principles outlined in the consultation paper provided an appropriate level of guidance and limits for AEMO to develop a deviation pricing framework in line with its proposed market design change.⁵⁴

Origin raised concern in their submission regarding the overlap between the AEMC and AEMO's consultation processes for this rule change - specifically, applying to the Procedures change process from AEMO. Origin suggested that stakeholders should have sufficient opportunity to assess AEMO's Procedures change proposal prior to the close of submissions to the AEMC's draft rule determination. Origin considered that overlapping the two consultation processes was particularly important as it allowed stakeholders to properly assess the AEMC's proposed principles in conjunction with the changes proposed by AEMO, to determine whether the principles provided sufficient guidance, or required further amendment.⁵⁵

Stanwell Corporation Limited

Stanwell generally supported removing the graduate deviation parameters from the NGR. Stanwell considered that implementation of a causer pays approach, as proposed by AEMO, negated the need for these parameters.⁵⁶

Alinta Energy

Alinta supported the inclusion of principles regarding deviation pricing. However, Alinta considered that the wording in the NGR should be clear such that AEMO must not make a determination which is inconsistent with these principles.⁵⁷

⁵³ See AEMC website, Origin Energy, consultation paper submission, page 2.

⁵⁴ See AEMC website, Origin Energy, consultation paper submission, page 2.

⁵⁵ See AEMC website, Origin Energy, consultation paper submission, page 3.

⁵⁶ See AEMC website, Stanwell Corporation Limited, consultation paper submission, page 2.

⁵⁷ See AEMC website, Alinta Energy, consultation paper submission, page 2.

Alinta also considered that the principles should be explicit in limiting the liabilities faced by trading participants with regard to AEMO calculating deviation charges and deviation payments:⁵⁸

“As such, whether a separate floor and cap is needed for deviation pricing seems less relevant than [whether] there [are] safeguards in the rules that ensure participants are not exposed to unlimited liability. In this instance, it would appear that the boundaries for deviation charges would rely on the Market Operator Service pricing parameters. This may be appropriate and if so, there is a view it should be specifically bounded as such via an explicitly connection to Market Operator Service.”

6.4 Stakeholder views - draft rule determination

No submissions on the draft rule determination were received in response to this issue.

6.5 Commission's analysis

The Commission considered that it was appropriate for the NGR to contain a set of principles and parameters to guide AEMO's development of deviation payments and deviation prices. The principles and parameters aim to efficiently allocate the risks associated with trading participants deviating from their daily gas schedules, and balance these risks against the financial risks of participating in the STTM. This is enabled by the final rule, which provides greater flexibility to design a deviation pricing framework that strengthens the causer pays principle.

The Commission noted that stakeholders were generally supportive of including high level principles in the NGR to guide AEMO's development of deviation charges and deviation payments.

The Commission also considered the issues raised by Alinta with regard to limiting the liabilities of trading participants. The Commission noted that, although unlikely, it is possible that a situation may arise whereby deviation charges and deviation payments were not determined on the basis of average MOS costs (as envisaged by AEMO), or in relation to the various gas prices in the market (ex ante, imbalance, contingency gas price and so forth). Further, each of these gas prices is limited by the NGR which, in turn, limits the prudential exposure of trading participants.

On this basis, the Commission decided, for reasons of good regulatory practice, to include additional principles and parameters in the NGR aimed at limiting the liability of trading participants in relation to deviation pricing. The principles and parameters require that deviation charges and deviation payments cannot be higher than the MPC plus the MOS cost cap, and not less than the MMP minus the MOS cost cap.

⁵⁸ See AEMC website, Alinta Energy, consultation paper submission, page 3.

If an administered price cap state applies (for example, for reasons relating to material involuntary curtailment), then deviation charges and deviation payments are similarly limited by the administered price cap, and the ex ante market price for that gas day.

The deviation pricing principles and parameters, as outlined in this final rule determination and contained in the final rule, should provide AEMO with the flexibility to undertake changes, more immediately and into the future, that further enhance the causer pays principle in the deviation pricing framework.

Abbreviations

AEMC, the Commission	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
ISC	Implementation Steering Committee
MCE	Ministerial Council on Energy
MMP	Minimum Market Price
MOS	Market Operator Services
MPC	Market Price Cap
MSV	Market Schedule Variations
NGL	National Gas Law
NGO	National Gas Objective
NGR	National Gas Rules
STTM	Short Term Trading Market

A Summary of issues raised in submissions - consultation paper

Stakeholder	Issue	AEMC response
Alinta Energy (Alinta)	AEMO's Procedures should be consistent, and never inconsistent, with the proposed principles and intent of the NGR.	The Commission notes this point.
Alinta	Where a matter is removed from the NGR in favour of AEMO Procedures, the NGR should contain principles which limit the judgement of AEMO, and not allow matters which conflict with the intent of the change or for the reintroduction of matters not contained in the NGR.	The Commission notes this point.
Alinta	Removal of the settlement surplus cap is supported by Alinta.	The Commission notes this point.
Alinta	Supports the inclusion of principles regarding deviation pricing but suggests change to wording such that "AEMO must not make a determination which is inconsistent with the listed principles".	The Commission notes this point. The final rule includes specific guidance as to how AEMO should apply the principles supporting the deviation pricing framework.
Alinta	Does not believe long deviations are as problematic as short deviations. By introducing average MOS costs, the penalty seems quite severe for a trading participant who is also unlikely to be deriving benefits from the MOS stack and may also be exposed to counter-acting MOS charges.	The Commission notes this point.
Alinta	Supports the amendments to better align causer pays, and in particular, to enable negative	The Commission notes this point.

Stakeholder	Issue	AEMC response
	deviation pricing to occur.	
Alinta	The boundaries for deviation charges would rely on the MOS pricing parameters, and should be specifically bounded via an explicit connection to MOS.	The Commission notes this point and the principles in the final rule reflect the limited liability of trading participants with regard to deviation payments and deviation charges.
EnergyAustralia	Supports the removal of the settlement surplus cap.	The Commission notes this point.
EnergyAustralia	Supports the removal of the graduated deviation parameters.	The Commission notes this point.
EnergyAustralia	Supports the rule change as submitted by AEMO.	The Commission notes this point.
Origin Energy (Origin)	Strongly supports the principle of the rule change proposal to strengthen causer pays in the STTM.	The Commission agrees with this point.
Origin	The proposed market design change goes a significant way to reduce deviation pricing uncertainty in the STTM.	The Commission agrees with this point.
Origin	Consider it to be good practice for the NGR to outline the high level policy directions and the Procedures to provide the technical specifics to give effect to those policy directions.	The Commission agrees with this point.
Origin	AEMC's proposed principles provide appropriate guidance and limits for AEMO to develop a deviation pricing structure in line with its proposed market design change.	The Commission agrees with this point.
Origin	Considers that the MOS service payment should	The Commission notes this point, and considers it beyond the scope of

Stakeholder	Issue	AEMC response
	be valued at the marginal clearing price rather than the pay – as – bid price.	this rule change request (see section 5.3).
Origin	Recommends the NGR is amended to introduce an ability to review and resettle price outcomes in the event that there are large deviations or scheduled MOS due to non-market factors.	The Commission notes this point, and considers it beyond the scope of this rule change request (see section 5.3).
Origin	Considers it is appropriate for AEMO to wait until the publication of the AEMC's draft rule determination before it commences its own Procedures change consultation. By doing this, stakeholders can confirm whether there is an appropriate balance of prescription in the NGR around the detail in the Procedures.	The Commission notes this point.
Stanwell Corporation Limited(Stanwell)	Supports a causer pays concept for deviation pricing in the STTM, provided there is a corresponding change to daily MOS.	The Commission notes this point.
Stanwell	Supports the removal of the settlement surplus cap, but only if there is also a change to a daily MOS period.	The Commission notes this point. The length of the MOS period was the subject of another AEMC rule change for which a final rule determination was published on 23 May 2013. See the AEMC website for <i>Market Operator Service - Eligibility and Timing</i> , final rule determination.
Stanwell	A change in forecast by a market participant in and of itself does not demonstrate forecasting inaccuracy or a lack of compliance with the good faith provisions of the NGR.	The Commission notes this point.
Stanwell	Has no objection to amendments to the definition of the MMP, MPC and deviation payments and charges as proposed by AEMO.	The Commission notes this point.

Stakeholder	Issue	AEMC response
Stanwell	Successful implementation of causer pays will only be achieved through a related move to daily MOS to provide market participants with sufficient flexibility to manage their daily MOS requirements.	The Commission notes this point. The length of the MOS period was the subject of another AEMC rule change for which a final rule determination was published on 23 May 2013. See the AEMC website for <i>Market Operator Service - Eligibility and Timing</i> , final rule determination.
Stanwell	An area for consideration in the future may be the potential removal of the ex post imbalance price as a mechanism for determining deviation pricing in the future.	The Commission notes this point.

B Summary of issues raised in submissions - draft rule determination

Stakeholder	Issue	AEMC Response
Origin Energy (Origin)	Changes to MOS pricing could further improve the cost to cause principle by providing stronger pricing signals and incentives.	The Commission considered this matter, and determined that it was not within the scope of this rule change request. This is because the intention of the rule change request was to specifically better align the prices paid or charged for deviations such that they facilitate the full recovery of MOS costs. The rule change request did not raise specific issues relating to how MOS is priced or the economic costs that may be incurred in providing MOS by trading participants (see section 5.3).
Origin	The MOS service payment should be valued at the marginal clearing price rather than the pay as bid price and the MOS commodity payment or charge should be set at the ex post imbalance price on the day, rather than the D+2 ex ante market price.	The Commission notes this point but considers the issue out of scope. The Commission notes that further changes to the STTM would require significant further analysis and stakeholder consultation. The Commission notes that in its Phase 2 of the STTM Review, AEMO concluded that various issues needed to be resolved before any further substantive changes are made to the design of MOS pricing, including: counteracting and excessive MOS; intra-hub constraints; and the price separation between long and short deviations and pay-as-bid pricing versus using a marginal clearing price. The Commission considers that if any further changes are considered to MOS pricing, they should be considered in the broader context of potential changes in the STTM (see section 5.3).
Origin	While Origin's proposal for changes to the MOS pricing arrangements is at an early stage of development, it is within scope from the perspective of addressing the problem identified by AEMO ("cost to cause").	The Commission considered this matter, and determined that it was not within the scope of this rule change request. This is because the intention of the rule change request was to specifically better align the prices paid or charged for deviations such that they facilitate the full recovery of MOS costs. The rule change request did not raise specific issues relating to how MOS is priced or the economic costs that may be incurred in providing MOS by trading participants (see section 5.3).
Origin	The AEMC has recently proposed a new "gas strategic priority" to promote the development of	The Commission notes this point but, as noted above, considers the

Stakeholder	Issue	AEMC Response
	efficient gas markets. In line with this priority, we consider the AEMC's assessment of the rule change should also discuss options like the one put forward by Origin, in the context of its gas market development role.	issues out of scope for this rule change.
Origin	Recommend a change to allow for the reopening of a gas day to review and resettle price outcomes. For example, a pipeline capacity error could give rise to large deviations for a non-market reason.	The Commission considered this matter, and determined that it was not within the scope of the rule change request. In February 2011, AEMO submitted a rule change request to the AEMC that considered pipeline data errors. The key purpose of that rule change request was to provide AEMO with more time to review and confirm the accuracy of STTM information to reduce the risk of errors in the setting of STTM schedules and prices. ⁵⁹ The Commission understands that since the making the rule in May 2011, there have not been any material events regarding the accuracy of pipeline data and price setting in the STTM.
Origin	Note that the likelihood of large deviations or scheduled MOS due to non-market factors may be relatively small. However, consider it is a relevant consideration for the AEMC's net benefit assessment of the rule change proposal as a whole.	The Commission notes this point.

⁵⁹ See AEMC, *STTM Data Validation and Price Setting Process*, final rule determination, 5 May 2011.