

30 August 2010

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

FROM THE OFFICE OF THE
CHIEF EXECUTIVE OFFICER

Level 22
530 Collins Street
Melbourne VIC 3000

Postal Address:
GPO Box 2008
Melbourne VIC 3001

T 1300 858724
F 03 9609 8010

By online submission

John,
Dear Mr Pierce

Amendment to the Calculation of Interest for Gas Markets

We request that the AEMC make a Rule under sections 295 and 304 of the National Gas Law relating to the calculation of interest rates for each of the gas markets operated by AEMO.

The Rule change proposal relates to the calculation of interest for compensation payments, adjustments to revised statements, and overdue amounts for the Declared Wholesale Gas Market. We are seeking to correct an error made in the transition of the Victorian Market and System Operations Rules to the National Gas Rules with respect to the method of calculation of interest in the Declared Wholesale Gas Market, and to clarify the current wording in the Short Term Trading Market and Natural Gas Services Bulletin Board Rules that the calculation of interest in these markets will be using simple interest in line with our systems.

In light of this and the immaterial effect on the market we ask that the AEMC treat the Rule change as non-controversial under section 304 of the National Gas Law.

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

This Rule change proposal supersedes a previous Rule change proposal submitted to the AEMC on 31 May 2010.

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

Yours sincerely



Matt Zema
Managing Director and Chief Executive Officer

Attachment A: Rule Change Proposal

Appendix A: Draft Rule

Attachment A: Rule Change Proposal

1 Summary

The proposed Rule change seeks to amend clauses 238(4), 238(6), 249(4)(b) and 253(2) of the National Gas Rules (**NGR**) to allow AEMO to calculate interest on compensation payments, adjustments to revised statements, and overdue amounts, using a simple interest methodology. The proposed amendments for the Declared Wholesale Gas Market (**DWGM**) would correct an unintended change that was made in transitioning the Market and System Operations Rules (**MSOR**) to the NGR on 1 July 2009. If the NGR were not amended, it would require costly changes to market systems to enable the above payments and amounts to be compounded daily for the DWGM, with no material change to market operations or financial outcomes.

AEMO also seeks minor amendments to clauses 466(4), 473(5)(b), 476(1) and 476(2) of the NGR to remove ambiguity regarding the calculation of interest for the Short Term Trading Market (**STTM**). These clauses currently specify that interest is to be calculated on a daily basis. The proposed Rule change seeks an amendment to clarify that interest is to be calculated daily on a simple interest basis.

In line with these changes, AEMO seeks minor amendments to clauses 194(3)(a), 194(3)(b), 194(4), and 195(3), with regard to interest for payments in relation to the National Gas Services Bulletin Board (**BB**). For the purposes of the BB, interest on overdue amounts is required to accrue on a daily basis. The Rule change proposes to amend the wording of the clauses to specify that interest is to be calculated daily using a simple interest methodology.

The amendments to the STTM and BB are proposed for clarification of current practice and consistency with the proposed changes for the DWGM and will result in no change to the market operation outcomes.

Finally, the definitions of reference interest rates for the DWGM, STTM, and BB, have become outdated and the proposed definitions would allow for the use of a 1 month Bank Bill Swap Reference Rate as calculated most recently by the Australian Financial Market Association (**AFMA**) for all three markets.

All of the changes proposed in this Rule change would amend errors in drafting, clarify, and streamline the Rules with no material affect on market incentives or outcomes. Accordingly, AEMO considers the Rule change proposal is eligible to be assessed as non-controversial.

2 Background

2.1 Methodology used for calculation of interest

Declared Wholesale Gas Market

Under the NGR, AEMO is required to settle the transactions between participants in the DWGM. As a part of this function, AEMO is required to calculate interest for:

- compensation determinations¹;
- revised statements²; and
- any overdue amounts.³

On 1 July 2010, the MSOR were transferred to the NGR, and in this process, certain rules were amended with the objective of improving clarity. Among these, amendments were made to clauses 3.6.6(f), 3.6.6(k), 3.6.19(d)(2) and 3.6.23(b) of the MSOR, to specify that interest is to be calculated on a compounding basis. Table 1 provides a comparison of the drafting of the relevant MSOR and the NGR rules and highlights the drafting changes made. AEMO notes that the drafting of clauses 3.6.6(f), 3.6.6(k), and 3.6.19(d)(2) of the MSOR does not explicitly state that the interest should be calculated on a simple interest basis; however, this was the interpretation of the wording at the time the Metering Management System (**MMS**)⁴ was designed and implemented. All relevant interest payments have been calculated and paid on a simple interest basis since the Victorian wholesale gas market commenced in March 1999.

AEMO notes that clause 3.6.23(b) of the MSOR which relates to the calculation of interest for overdue amounts allows for interest to be calculated daily and compounded on monthly rates on the last day of each month. In the DWGM, overdue amounts arise when a Market

¹ Compensation claims (determined by the Dispute Resolution Panel) arise when AEMO has directed a Registered participant to inject gas into the Declared Transmission System (refer to rule 344 of the NGR) and as a result of that direction, the Registered participant has experienced a loss, or has received a price for the injected gas which is below their specified injection bid, or their ancillary payments have been reduced as a result of the action (refer to rule 350 of the NGR).

² Revised statements include adjustments to the final statement due to new meter data reads or corrections identified in the 118 business days from the release of the final statement. Interest is calculated on the adjusted amounts for the period and included in the revised statement issued to Market Participants.

³ Market Participants or AEMO are required to pay interest on any overdue amounts on payments covered in subsection 6 of the NGR (refer to rule 235 of the NGR). Specifically, interest accrues from the date payment was due up to and including the date the payment is made on payments of final and revised settlements as well as on compensation payments.

⁴ The MMS is the system used to maintain the meter register, runs the daily prudential, and process all types of settlements (preliminary, final, revision, and additional special revision as required). This system was designed in accordance with the requirements of the MSOR for market start which occurred in February 1999.

Participant of AEMO fails to make a payment by the due date. Immediately following the failure to make a payment, AEMO issues the Market Participant a default notice. Market Participants are suspended 24 hours later should they fail to make payment in that time in accordance with the Rules. AEMO notes that the prudential requirements for the DWGM have evolved since the drafting of these Rules.

Table 1: Comparison of MSOR and NGR obligations

Circumstance	Market and System Operations Rules (v31)		National Gas Rules (v2)	
	Clause	Relevant extracts	Clause	Relevant extracts
Compensation amounts	3.6.6(f)	Interest is to be calculated on a daily basis and aggregated for the period.	238(4)	Interest is to be compounded daily.
	3.6.6(k)	Interest is to be calculated on a daily basis and aggregated for the period.	238(6)	Interest is to be compounded daily.
Adjustments to final statements for revised statements	3.6.19 (d)(2)	...interest calculated on a daily basis at the interest rate for the period...	249 (4)(b)	...interest (compounded daily) at the interest rate for the period
Overdue amounts	3.6.23(b)	...the default interest rate calculated as simple interest on a daily basis ... with interest compounding on monthly rates on the last day of each month....	253(2)	...the interest accrues at the default interest rate, compounding daily...

Short Term Trading Market

Interest in the short term trading market will be calculated as per Part 20 of the NGR for the purposes of:

- determination and payment of claims⁵;
- revised statements⁶; and
- any overdue amounts.⁷

The drafting for the rules outlining the use of interest for these payments, like those for the DWGM, were based on clauses which existed in the MSOR (as per Table 1).

⁵ Payments under rule 466 'Determination and payment of claims' arise when a Trading Participant has made a claim related to the application of an administered market state and has incurred a loss either due to a quantity of natural gas being supplied to a hub when the net amount per GJ payable is less than the price specified for that quantity in its ex ante offer, or contingency gas being provided to a hub when the contingency gas price is less than the price specified in the contingency gas offer.

⁶ Revised statements are prepared, in accordance with rule 473, on the 5th business day after the end of the 9th billing period after the relevant billing period. Interest is calculated on any adjustments between the final statement and the revised statement for the approximate 9 month period between the preparations of the two statements. Revised statements may also be issued if within 18 months of a billing period, AEMO becomes aware of an error. Interest would also be calculated on the difference for the time in which the erroneous statement was prepared and the corrected statement is issued.

⁷Rule 476 'Interest on overdue amounts' allows that Trading Participants and AEMO must pay interest on any unpaid moneys due, and that interest is payable on the outstanding amount for the period commencing on the date payment was due and ending on the date payment is made.

With the exception of clause 3.6.23(b) of the MSOR (interest on overdue amounts), these provisions did not specifically state the methodology by which interest was to be calculated; only that it be calculated daily. Hence, all provisions for the STTM specify that interest is to be calculated on a daily basis⁸. The clauses are silent as to whether this is to be on a simple interest basis or a compound interest basis.

These provisions were implemented in the NGR for the calculation of interest in the STTM with the intent of adopting the same methodology that had been deployed in the Victorian gas wholesale market since 1999. Consistent with the methodology applied for the DWGM, the STTM systems were designed to calculate interest only on a simple interest basis. It is intended that this is the method that will be used for the purposes of interest calculation at market commencement on 1 September 2010.

Natural Gas Service Bulletin Board

Clauses 194(3)(a), 194(3)(b)(i), 194(4), and 195(3) of the NGR relate to the calculation of interest for the purposes of the BB. Specifically, interest is calculated when there is a manifest error in invoicing for BB services (rule 194), or in specific circumstances following the dispute of an invoice (rule 195). The only payments made in relation to the BB are fees to recover AEMO's costs associated with the operation of the BB. These are charged to all BB participants and total approximately \$200,000 per annum.

2.2 Interest Rate Definitions

There are various definitions for 'interest rate' in the NGR. Definitions currently appear in Part 19 'Declared Wholesale Gas Market Rules', Part 20 'Short Term Trading Market Rules', and Part 18 'Natural Gas Service Bulletin Board'. The definitions are outlined in the following table:

Table 2: Interest Rate Definitions for DWGM, STTM, and Bulletin Board

Part of NGR	Reference	Term	Definition
Part 19 Declared Wholesale Gas Market Rules (Victoria)	NGR 203	interest rate	(1) A reference in this Part to the interest rate is a reference to the Bloomberg Bank Bill Swap Reference Rate most recently published in the <i>Australian Financial Review</i> . (2) If the above rate ceases to exist, or that rate becomes, in AEMO's reasonable opinion, inappropriate, the interest rate is a rate determined and published by AEMO.
	NGR 200	default interest rate	means an interest a rate of 2% above the interest rate

⁸ Clauses 476(1) and 467(1) which were based on clause 3.6.23(b) of the MSOR were drafted without allowance for interest to be compounded on monthly rates on the last day of each month as the MSOR suggests. This was agreed in principle by the Gas Market Leaders Group such that all payments types aligned with agreed system design for the STTM.

Part of NGR	Reference	Term	Definition
Part 20 Short Term Trading Market Rules	NGR 364	interest rate	means, at any time: (a) the Bloomberg Bank Bill Swap Reference Rate identified by AEMO on its website for the purposes of this Part, as most recently published in the Australian Financial Review; or (b) if no such rate is published or, in AEMO's reasonable opinion, appropriate, a replacement rate determined and published by AEMO.
	NGR 364	default interest rate	means a rate of 2% above the interest rate.
Part 18 Natural Gas Service Bulletin Board	NGR 141	applicable interest rate	means the interest rate quoted from time to time by Australia and New Zealand Banking Group Limited as its reference rate or, should there cease to be such a reference rate, the rate which that bank designates as being an appropriate substitute for the reference rate.

Publication of interest rates

The Australian Financial Review (**AFR**) publishes Bank Bill Swap (**BBSW**) Reference Rates sourced from AFMA, an industry association for Australia's wholesale banking and financial markets. The BBSW published by AFMA is a compilation and average of market rates supplied by domestic banks in regard to the specific maturities of bank bills and is the rate at which banks will lend to each other. It is calculated for various maturities, at 10am each business day. AFMA's service provides an independent and transparent reference rate for the pricing and revaluation of Australian dollar derivatives and securities. The rates published by AFR are historical since they are the rates determined by AFMA for the previous trading day. Data is available at 10am on the day that it is calculated to subscribers of AFMA, and on a 24 hours delay, free of charge, to non-subscribers⁹.

AFMA provides the compiled data to both Bloomberg and Thomson Reuters (**Reuters**) data services, who also publish this data to BBSW subscribers as soon as it is calculated just after 10am each day.

AEMO sources the interest rate data used for the purposes of performing its market operation duties from Reuters (using the DataScope automated service). Sourcing data in this manner allows AEMO to use the most up-to-date data for market settlement processes. All data service providers quote the bid, offer, and mid rate for each tenor of the BBSW rates¹⁰. AEMO uses the mid rate quoted.

For the DWGM, AEMO currently uses the 3 month BBSW Reference Rate calculated by AFMA. While the current Rules do not specify a tenor for the rate to be used, this rate with a 3 month tenor has been and continues to be used because this was the rate identified in the

⁹ For more information see AFMA's website at: www.afma.com.au

¹⁰ "Rates", AFMA, available at: <http://www.afma.com.au/scripts/nc.dll?AFMAV6.852304:STANDARD:1478254805:pc=L6C1S6>

MSOR definition¹¹. For the STTM, AEMO also intended to use the 3 month BBSW Reference Rate calculated by AFMA and provided to both Bloomberg and Reuters¹².

Averaging methodology

In determining the interest rate to be used for all interest calculations in the DWGM, AEMO applies an averaging methodology. Daily data is collected on the BBSW Reference Rate over the time period for which interest is to be calculated and is averaged by the number of days over which interest is to be calculated. The formula for the averaging methodology is as follows¹³:

$$\text{Average rate for time period} = \frac{r_{\text{day1}} + r_{\text{day2}} + r_{\text{day3}} + \dots + r_{\text{dayN}}}{N(\text{total number of days})}$$

The same methodology is to be used to determine the interest rate applicable to payments in the STTM and would be employed for the purposes of the BB should the need to calculate interest arise. AEMO also notes that this is the same averaging methodology used in the National Electricity Market.

3 Statement of Issues

3.1 Methodology used for calculation of interest

MMS calculates the interest payments for compensation amounts, revised statements and overdue amounts in the DWGM. This system was designed to calculate interest using a simple interest methodology based on the accepted interpretation of the MSOR provisions which have been in place since market start in 1999. As explained, a change introduced when the MSOR was transferred to NGR, means that the current rules now specify that AEMO calculate interest on a daily compounding basis rather than a simple interest basis for these payments. The Rule change was not sought by, nor consulted on with affected Market Participants, nor were the amendments made with the intention of requiring a change to existing systems or methodology. Consequently, the MMS remains unchanged and continues to calculate interest using the simple interest methodology employed from market start.

On 25 March 2010 AEMO notified the Australian Energy Regulator (**AER**) of this discrepancy. In response, the AER issued a letter of “no action” on 31 March 2010 for non-

¹¹ “the ninety day Bloomberg Bank Bill Swap Reference Rate as published in the Australian Financial Review from time to time”, definition for interest rate from Chapter 10 ‘Glossary’, Market and System Operations Rules, Version 31, Operational: 1 May 2009.

¹² STTM Interest Rate Definition, available at AEMO’s website:

http://www.aemogas.com.au/index.php?action=filemanager&doc_form_name=download&folder_id=2363&doc_id=6465

¹³ Where interest is calculated daily on a simple interest basis this methodology results in the amount of interest being calculated of the time period being simply the sum of the individual days interest rates.

compliance with clauses 238(4), 238(6), 249(4)(a)¹⁴ and 253(2) of the NGR subject to AEMO submitting a Rule change proposal to the AEMC. A copy of AEMO's letter to the AER and the AER's response, received on 31 March 2010, are posted on AEMO's website¹⁵ and were distributed to all Market Participants, and Gas Wholesale Consultative Forum (**GWCF**) members. AEMO consulted on the Rule change proposal through the GWCF, which indicated unanimous support for the change. AEMO has not received any objections or complaints from Market Participants as to the interest payments made since market start in 1999 (either before or after the transition from the MSOR to the NGR on 1 July 2009), nor to the intention to seek this Rule change.

In order to comply with the current drafting, AEMO would need to incur costs of more than \$105 000 to change the MMS¹⁶, with the likely annual impacts on financial outcomes being a small fraction of this amount.

AEMO considers that the NGR error should be corrected so that the market does not incur costs associated with system changes which would ultimately flow through to end consumers without any material change to financial outcomes.

Interest on overdue amounts for DWGM

As mentioned earlier, interest calculations for the purposes of overdue amounts arise in the circumstance where a Market Participant has failed to make a payment. In the MSOR, interest on these amounts was required to be the default interest rate calculated as simple interest on a daily basis with "interest compounding on monthly rates on the last day of each month"¹⁷. The current definition allows, incorrectly, that interest on overdue amounts be compounded daily. AEMO considers that reverting the Rules back to the drafting in the MSOR would maintain a level of ambiguity regarding which rates are to be used (monthly or the defined interest rate). Further, the prudential requirements in the market have evolved since the drafting of the Rule such that it is possible for the timely issuance of default notices and subsequent suspension of participants. Therefore, from a practical point of view, AEMO notes that if a participant were to default on its payment and subsequently be required to pay interest on the overdue amount, it is likely that it would either pay the overdue amount immediately in order to avoid being suspended from the market, or alternatively, not be in a position to pay the interest or the overdue amount within a reasonable time period. In such circumstances, it is likely that the interest owing would be only one of a number of significantly larger debts outstanding for the entity.

¹⁴ Due to a editorial error, the letters from AEMO to the AER, and the AER to AEMO, both specify clause 249(4)(a), however, this should have been a reference to 249(4)(b) which deals with the calculation of interest.

¹⁵ AEMO's letter to AER, and AER's letter to AEMO: "No action for non-compliance with National Gas Rules", both available at AEMO's website: http://www.aemogas.com.au/index.php?action=filemanager&folder_id=1667&pageID=9950§ionID=9948

¹⁶ A breakdown of the costs associated with this system change has been provided confidentially to the AEMC.

¹⁷ From clause 3.6.23(b), 'Interest on overdue amounts', Market and System Operations Rules, Version 31, Operational 1 May 2009.

AEMO considers that amending clause 253(2) of the NGR to allow interest to be calculated on a simple interest basis would be consistent with market systems, align the methodology with that used for other interest payments and would not have a material effect on the market because interest on overdue amounts is almost never calculated due to the updated prudential systems in place.

Consistent, clear provisions for the STTM

Clauses 466(4), 473(5)(b), 476(1) and 476(2) of the NGR, relating to the calculation of interest in the STTM, specify that interest is to be calculated daily. They are silent on the interest calculation methodology to be applied; hence, it could be unclear from reading these rules what interest calculation methodology is to be applied. AEMO considers that it would be prudent to amend clauses 466(4), 473(5)(b) and 476(2) of the NGR to improve the clarity and consistency of these clauses with those amendments proposed for the DWGM. The proposed changes do not seek to change the methodology that will be applied to the STTM; rather to make the methodology to be applied clear in the NGR.

An email notice addressed to the STTM Business Liaison Group and the STTM Industry Legal Working Group was sent from AEMO on 24 May 2010 advising of these proposed changes. AEMO did not receive any objections to these proposed changes. The recently formed STTM Consultative Forum has also indicated unanimous support for the proposed changes (further details on consultation supplied in section 4.2).

Consistent, clear provisions for the Bulletin Board

Clauses 194(3)(a), 194(3)(b)(i), 194(4), and 195(3) of the NGR relate to the calculation of interest for the purposes of the BB. These rules allow that interest for the BB accrues on a daily basis. This description is ambiguous since it may be interpreted as either interest compounding (and accruing) daily or as simple interest accruing daily. Consistent with the provisions for the DWGM and the STTM, AEMO proposes amending these clauses to specify that interest is to be calculated on a simple basis.

Given that the only payments in relation to the BB are fees to recover AEMO's costs associated with the operation of the BB, it is unlikely that any material interest amounts would occur. There have been no occasions where interest has been required to be calculated to date.

3.2 Interest Rate Definitions

The current definitions for interest rate used for the DWGM, the STTM, and the BB are inconsistent and, in some cases, are no longer published. While these are effective provisions currently in place to cater for this, AEMO proposes that the AEMC take this opportunity to update and streamline these definitions.

Issue with definitions for DWGM and STTM

Firstly, the definition for interest rate in both the DWGM and STTM refer to a Bloomberg Reference Rate published by the AFR. The AFR no longer identifies the source of the published rates as Bloomberg. Consequently, AEMO has been exercising the provision in the Rules that allow it to use an alternate suitable rate for the DWGM, and had the intention of using an alternate, published rate for the STTM when it commenced¹⁸.

Secondly, the definition for interest rate for these markets does not define a tenor for the Reference Rate to be used. The definition used in the Victorian Wholesale Gas Market when it was governed by the MSOR identified the appropriate tenor of the Reference Rate as being 3 months. The definition for the STTM does not include a tenor. AEMO suggests that the tenor for the BBSW reference rate in the definition be re-inserted (in the case of the DWGM) or added (in the case of the STTM). Specifying a tenor in the definition would give transparency and clarity as to the rate that is used for interest rate calculation. It would remove any doubt as to which rate should be use and gives AEMO greater guidance as to the appropriate rate that should be used in the case that the rate ceases to exist.

Identification of AFMA as the primary source for Reference Rates

AEMO currently uses BBSW Reference Rates calculated and published daily by AFMA. Both Bloomberg and Reuters report this rate live, the AFR reports this rate the following day.

AEMO considers the Rules would be more accurate should they refer to the source from which the rate originates, rather than a service provider. Bloomberg and Reuters are both service providers and may change where they source their rates or the manner in which they report them. Hence, AEMO proposes the definition be amended to refer to the BBSW Reference Rate most recently calculated by AFMA, rather than by either Bloomberg or Reuters. This definition would allow for AEMO to continue to source its data from Reuters, but, identifies the true origin of the rate rather than a data service provider.

Insertion of tenor and appropriate rate to use

AEMO currently uses a 3 month BBSW rate for the DWGM for historical reasons (as explained earlier). However, AEMO suggests that it would be more efficient and consistent to use a 1 month BBSW rate. AEMO suggests this for several reasons:

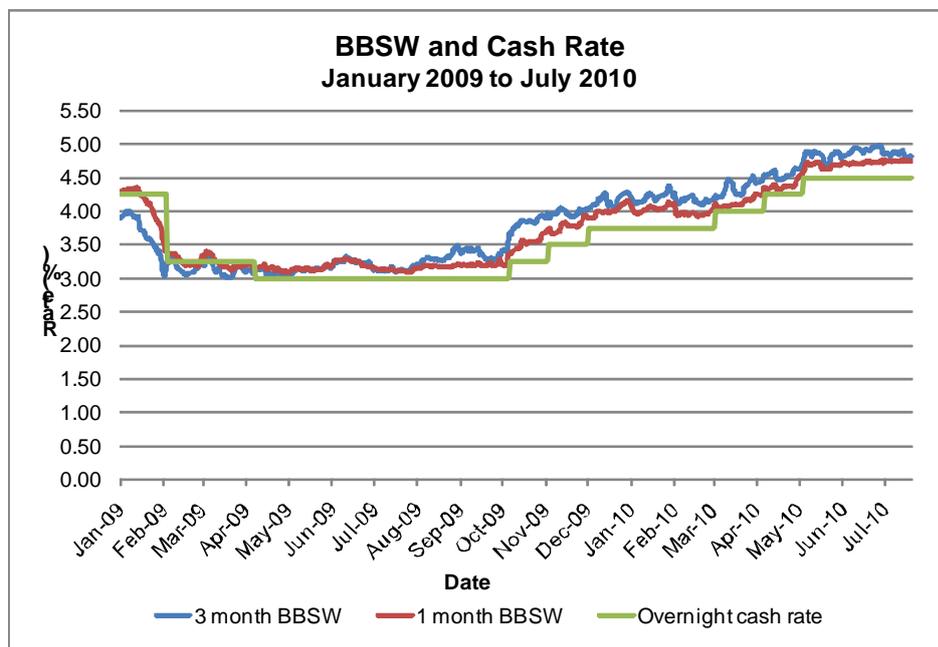
1. The 1 month BBSW rate attracts less speculative trading and so is less volatile than the 3 month BBSW rate, therefore providing greater certainty to the market.
2. The 1 month BBSW rate is currently used in the NEM and adoption of this rate across the gas and electricity markets will enable AEMO (and inturn the gas and electricity markets) to more easily realise efficiency gains as market operation systems become streamlined.

¹⁸ "STTM Interest Rate Definition", AEMO website:

http://www.aemogas.com.au/index.php?action=filemanager&doc_form_name=download&folder_id=2363&doc_id=6465

The following figure shows the 1 month BBSW, 3 month BBSW, and the overnight cash rate between January 2009 and July 2010.

Figure 1 BBSW and Cash Rate



Source: Thompson Reuters

Figure 1 shows that the 1 month rate is less volatile than the 3 month rate. Given the nature of the payments for which interest is calculated, AEMO considers that a less volatile rate would be preferable since it exposes participants to less risk.

AEMO notes that the overnight cash rate, set by the Reserve Bank of Australia, may not be appropriate to use for the purposes of the gas market payments since it does not reflect the cost of capital in the market. The overnight cash rate is the “risk-free” cash rate. NGR provides for interest to be included in certain payments so that participants are compensated for the investment that they could have made had the correct amount been charged / estimated / or delivered originally.

Interest rates compensate lenders for the time period over which money is borrowed. The averaging methodology ensures that unexpected, high volatility events in the market do not result in large costs (or gains to the market). This methodology gives more significance to the average return expected over the period than the tenor of the underlying note that is used in the calculation.

AEMO notes that no system changes would be required for the DWGM, or the STTM for the adoption of a 1 month BBSW rate.

Proposed definition

AEMO proposes that definition of interest rate for the DWGM and STTM be amended to reflect current practices and ensure clarity and transparency for the natural gas market. The proposed definition:

- (1) Is a reference to the 1 month Bank Bill Swap Reference Rate identified by AEMO on its website most recently determined by the Australian Financial Markets Association.
- (2) If the above rate ceases to exist, or that rate becomes, in AEMO's reasonable opinion, inappropriate, the interest rate is a rate determined and published by AEMO.

The proposed definition seeks to update the Rules which have become outdated. An update of this kind should ensure transparency, and accuracy in the market in relation to these definitions. It should also mean that AEMO would no longer be in a position where it must determine the appropriate interest rate; rather, this would be clearly and accurately defined in the Rules.

While AEMO has no issue with determining the appropriate rate should the need arise, we consider that there are other informed and interested parties who are best able to assess the risks and efficiencies that various different interest rates may result in for the market. Should the need ever arise for AEMO to determine the interest rate and this was likely to have a material effect on the market, then it would seek to develop one in consultation with industry, however, the expanded definition gives AEMO stronger guidance as to the appropriate rate, should the need arise.

Issue with definition for Bulletin Board

The definition of interest rate in the BB refers to an Australian and New Zealand Bank (**ANZ**) rate which no longer exists. As mentioned, interest for the BB is calculated only where there is a manifest error in the invoicing of service fees or in the case of disputed invoices. AEMO has never had to calculate interest for the purposes of the BB. Should AEMO be required to calculate interest, in accordance with the Rules, it would contact ANZ for an appropriate substitute reference rate.

AEMO considers that the definition would be clearer and more transparent if it were amended to be the same as the definitions proposed for the DWGM and STTM. Alignment of the three markets will allow for efficiency gains to be realised as AEMO looks to streamline its market and operating systems. Therefore, AEMO proposes that the references to "applicable interest rate" to be "interest rate" and to give the definition of interest rate the same meaning as that proposed for the DWGM and STTM.

Additional Amendments to BB and movement of definition to section 7 of the NGR

AEMO also proposes a minor amendment to clause 194(4) which refers to a "rate of interest which is 2% per annum above the applicable interest rate". With the change from "applicable

interest rate” to the “interest rate” definition, this clause meets the definition for “default interest rate” as used in the DWGM, and STTM.

If all definitions for “interest rate” and “default interest rate” are consistent across the three Parts of the Rules, AEMO suggests that these definitions be removed from the various Parts and inserted into Part 1, rule 3 which contains definitions applicable to all parts of the NGR. Moving the references to rule 3 would simplify the NGR and possibly avoid definitions becoming inconsistent with one another in the future.

4 Proposed Rule

4.1 Description of the Proposed Rule

The proposed Rule would replace the references to “daily compounding” with wording that specifies the interest is to be calculated on a simple interest basis in clauses 238(4), 238(6), 249(4)(b), and 253(2) of the NGR. The additional wording in rule 253 reverts back to the wording used in the MSOR which allowed interest to be compounded monthly while moneys remained outstanding.

In addition, the proposed Rule would insert wording in clauses 466, 473(b) and 476(2) to make it clear that interest will be calculated on a simple interest basis for the STTM, this will ensure consistency of the NGR.

Finally, the proposed Rule amends the definition for interest rate in rules 203, 364, and 141, streamlining these definitions across the three Parts of the NGR, giving clarity, and ensuring consistency. There are also minor amendments required for rules 195 and 196 to enable this streamlining.

AEMO’s draft Rule is in Appendix A.

4.2 Request for a Non-controversial Rule

AEMO requests that the AEMC reviews this Rule change proposal under section 304 of the NGL. Section 304 applies if the AEMC considers that a request for a Rule is non-controversial, that is, the proposed Rule is unlikely to have a significant effect on the market for gas or the regulation of pipeline services.

Methodology used for calculation of interest

AEMO considers that section 304 applies to the proposed amendments to Part 19 of the NGR. The proposed amendments would not have a material impact on Market Participants in the DWGM as it seeks to correct erroneous changes made in transferring the MSOR to the NGR which have not been implemented by AEMO in its systems. Analysis of a sample of historical peak gas demand months has shown that the largest impact on any Market Participant’s monthly settlement amount through applying the different basis for interest

calculation would be approximately \$39; an immaterial amount¹⁹. There have been six revised statements where AEMO has calculated interest using a simple methodology rather than daily compounding. The following table shows the differences in between the two methodologies for these months for the market as a whole.

Table 3: Comparison of Simple and Compound interest payments

Month	Payments from Participant to Market			Payments from Market to Participant		
	Simple	Compound	Difference	Simple	Compound	Difference
July 2009	\$3,895.14	\$3,933.84	-\$38.70	-\$3,897.36	-\$3,935.58	\$38.22
August 2009	\$4,426.95	\$4,472.11	-\$45.17	-\$4,429.26	-\$4,474.37	\$45.11
September 2009	\$4,409.76	\$4,457.88	-\$48.12	-\$4,410.21	-\$4,457.40	\$47.19
October 2009	\$2,928.33	\$2,959.47	-\$31.14	-\$2,929.66	-\$2,960.67	\$31.00
November 2009	\$2,707.81	\$2,737.51	-\$29.69	-\$2,387.45	-\$2,413.63	\$26.18
December 2009	\$1,660.70	\$1,679.32	-\$18.62	-\$1,666.24	-\$1,684.90	\$18.66
Total difference			-\$211.44*	Total difference		\$206.36*
*Rounding accounts for the \$5.08 difference between payments to and payments from the Market						

If interest were calculated with interest compounding daily for these months, an additional \$200 would have been paid by and received by Market Participants. These months may be indicative of the future impact to the market should the Rules be amended, rather than a more costly redesign of MMS. Given the magnitude of the amounts (roughly \$35 per month), AEMO does not consider that amending the Rules, to reflect the past Rules and current practices, would have a material effect on the market.

As mentioned earlier, AEMO consulted with industry regarding the changes to the DWGM via the GWCF prior to requesting a letter of no-action from the AER. No objections were raised and action to proceed with the Rule change proposal was accepted.

Consistent, clear provisions for STTM

Given that the rule change proposal relates to a clarification of the current Rules AEMO also considers that section 304 applies to the minor amendments proposed for the rules regarding the calculation of interest for the STTM since they are unlikely to have a material effect on the STTM. These amendments would not affect market operation or outcomes at all but merely seek to clarify what will occur in practice when the market commences operation.

¹⁹ Detailed analysis of the effect on individual Market Participants has been supplied confidentially to the AEMC.

Consistent, clear provisions for BB

Section 304 applies to the suggested amendments to the clauses 194(3)(a), 194(3)(b)(i), 194(4), and 195(3) of Part 18 of the NGR. Amendments to the words outlining the methodology to be used for interest calculation in the BB do not seek to change the methodology, rather, they aim to clarify what the methodology would be should the need to calculate interest arise. As such, the amendments do not constitute a material change.

AEMO conducted a consultation on the proposed amendments. A memorandum outlining the proposal was posted on the BB website on 10 August 2010 which sought comments on the proposed changes by 20 August 2010.²⁰ No comments or objections to the changes were received. AEMO notes that many of the BB participants are also involved in either the DWGM or the STTM (or both), these participants have had the opportunity to comment on the changes in all three markets via industry forums, emails distributed, and notices published on AEMO's website.

Interest Rate Definitions

AEMO also considers that section 304 applies to the proposed amendments to interest rate definitions. The current definitions for the DWGM and STTM allow for AEMO to determine and publish an appropriate rate is the first rate either ceases to exist or becomes, in AEMO's reasonable opinion, inappropriate. The proposed change is non-controversial since it does not result in a material change from the rate that is allowed in the current definition (since the current definitions do not specify a tenor for the reference rate).

The STTM is yet to commence, and so the amendment to the definition is not material. However, had the market already commenced, the difference between calculations using the proposed rate (as per the AEMO website) and the rate suggested by the updated definition would still not result in a material change to the market.

The supporting reasons for the use of a 1 month BBSW rate rather than a 3 month BBSW rate in the DWGM and STTM were outlined in Section 3.2 on page 8.

The proposed changes to the definition of interest rate in the two markets were discussed at the GWCF and the STTM Forum in July 2010. Explanatory notes outlining the proposed changes and the materiality of the changes were also emailed to participants in these markets. No comments were received in relation to the proposed changes and they were unanimously supported in the meetings. The notices and copies of the meeting minutes will be available on AEMO's website in the coming month.

GWCF participants, who supported the Rule change put forward originally on 22 March 2010, noted the additional amendments to be included in the Rule change at the GWCF on

²⁰ Memorandum to Bulletin Board – 10 August 2010, "Amendment to Interest Rate Rule Change", available at: <http://www.gasbb.com.au/Data/Notices/General/Memo%20to%20Bulletin%20Board%20-%2010%20August%202010.pdf>

22 July 2010. In addition, a memorandum outlining the changes was distributed to DWGM participants and subsequently posted on the AEMO website on 4 August 2010²¹. No objections were received.

A similar memorandum was distributed to STTM participants and discussed at the STTM Forum on 27 July 2010²². The minutes for this meeting reflect that attendees noted the update and endorsed the proposed approach without objection. These minutes were accepted at the meeting on 24 August 2010.

AEMO also considers that section 304 applies to the amendment to the interest rate definition for the BB. As mentioned, AEMO has never been required to calculate interest for the BB since there has never been a manifest error in the invoicing and no disputes have arisen since the BB started operation on 1 July 1998. The annual cost of the BB is approximately \$200,000²³. Interest amounts on any manifest errors in the invoicing to the 40 participants who contribute to these costs via service fees are unlikely to be substantial in magnitude. Likewise, any future disputes of invoices are unlikely to result in material amounts of interest payments between AEMO and BB users. Since the interest amounts that may be hypothetically calculated for the BB would be immaterial, an amendment to change the reference rate to be used for the purposes of this calculation would also be immaterial. Hence, changing the definition from the ANZ dictated rate to a 1 month Bank Bill Swap Reference Rate would not have a material impact on the operation of the BB or the services it provides to registered participants. As per the previous section, consultation with BB users was conducted by AEMO and no objections to the proposed changes were received.

5 How the Proposed Rule Contributes to the National Gas Objective

Methodology used for calculation of interest

AEMO considers that the proposed Rule is likely to contribute to the NGO because it would promote more efficient operation of natural gas services with respect to price. The proposed Rule would ensure that AEMO would not have to make costly system changes to the MMS to accommodate the change to these rules erroneously made in transferring the MSOR to the NGR. If incurred these unnecessary costs would be passed through to Registered participants in the DWGM via higher gas fees and would ultimately be borne by consumers of natural gas. Further, AEMO considers that because of the amounts involved there would be no impact on market incentives or behaviours and no material impact on financial outcomes as a result of a different basis for interest calculation.

²¹ Memorandum to GWCF: Amendment to interest rate Rule change, available at AEMO's website:

http://www.aemogas.com.au/index.php?action=filemanager&folder_id=1667&pageID=9950§ionID=9948

²² Memorandum to STTM Forum: Amendment to Interest rate rule change, available at AEMO's website:

http://www.aemogas.com.au/index.php?action=filemanager&folder_id=2441&pageID=9954§ionID=9948

²³ Bulletin Board Budget 2010/11, available at AEMO's website: <http://www.aemo.com.au/registration/0120-0017.pdf>

In addition, AEMO considers that the proposed amendments regarding the calculation of interest for the STTM and BB are likely to contribute to the NGO because they promote regulatory certainty by increasing the clarity of the NGR and aligning it to current practices. Consistency in interest rate calculation methodologies may also allow for future efficiency improvements in the settlement processes across these markets. Therefore, AEMO considers that the proposed Rule contributes to the effective regulation and efficient operation of the DWGM, STTM, and BB.

Interest Rate Definitions

Updating the definitions in a consistent manner across the three Parts of the NGR, promotes clarity, simplifies the NGR, and ensures that the Rules are transparent and accurate. The proposed definition provides benefit to the market since it removes any ambiguity which currently exists given the outdated nature of the current definitions. It promotes the efficient operation of the market in the long term interests of consumers of natural gas.

The insertion of a 1 month tenor in the definition allows AEMO to reduce costs across energy markets. Since the Reference Rates for the three markets would be the same as each other, and the same as that used in the National Electricity Market, AEMO would only need to source the one rate, rather than spending time sourcing various rates for the various markets.

6 Expected Benefits and Costs of the Proposed Rule

Methodology used for calculation of interest

AEMO expects that the proposed Rule would provide benefit to Registered participants in the DWGM because they would not be required to pay, through participant fees, for the MMS changes required to change the calculation of interest from a simple interest to a compound interest basis. AEMO estimates that the cost of implementing the system changes would be approximately \$105 000.

The difference between the simple interest payments and the estimated compound interest payments that have and would have occurred over a six month period in which the incorrect clauses have been in place have been analysed (see Table 3 on page 13). The net payments between Market Participants would have been approximately \$210 higher for the six month period should compound interest have been used as per the current NGR. Individual Market Participants would have either received less interest on payments for gas injected, or paid less interest on gas withdrawn from the market depending on their month to month positions in the market. The difference between compound and simple interest for individual Market Participants was no greater than \$10 in magnitude for an average of three out of the 19 Market Participants (for which interest was calculated) for each month. The largest differences calculated for the three peak gas demand months were \$21.31, \$27.78,

and \$39.06. AEMO considers that the difference in interest calculation methods is not material for any Market Participants that have been affected to date and will not be material for any Registered participants likely to be affected in the future.

Additionally, AEMO considers that the STTM participants and BB users would benefit from the proposed minor rule change amendments because they would clarify that a simple interest methodology is to be used for interest calculations. AEMO does not expect any compliance costs would result from clarifying these rules.

Finally, the Rule change will reduce any confusion that an inconsistency between provisions outlining identical (or near identical) processes may allow for in the NGR. As discussed, the expected benefit is an increase in regulatory certainty for participants.

Interest Rate Definitions

The benefit of updating and streamlining the definitions is that increased regulatory certainty, since AEMO is no longer required to determine that rate, since the rate is accurately and transparently available in the NGR. Further, the proposed definitions aligns with the definition used in the National Electricity Market, which allows AEMO to source the rate used in all markets for which it provides services at the one time, which reduces costs to the energy market. AEMO does not expect any compliance or system costs would result from clarifying these definitions.

GLOSSARY

Term or Abbreviation	Explanation
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AFMA	Australian Financial Markets Association
AFR	Australian Financial Review
BB	Bulletin Board
BBSW	Bank Bill Swap Rate
DWGM	Declared Wholesale Gas Market
GWCF	Gas Wholesale Consultative Forum
MCE	Ministerial Council on Energy
MMS	Metering Management System
MSOR	Market and System Operations Rules
NEM	National Electricity Market
NGL	National Gas Law
NGO	The National Gas Objective as stated in section 23 of the NGL
NGR	National Gas Rules
STTM	Short Term Trading Market

Appendix A: Draft Rule

This draft is based on version 2 of the National Gas Rules.

Part 1 Preliminary

3 Interpretation

In these Rules:

default interest rate means a rate of 2% above the interest rate

interest rate

- (a) Is a reference to the 1 month Bank Bill Swap Reference Rate identified by AEMO on its website most recently determined by the Australian Financial Markets Association
- (b) If the above rate ceases to exist, or that rate becomes, in AEMO's reasonable opinion, inappropriate, the interest rate is a rate determined and published by AEMO

Part 18 National Gas Services Bulletin Board

141 Interpretation

default interest rate means a rate of 2% above the interest rate

~~**applicable interest rate** means the interest rate quoted from time to time by Australian and New Zealand Banking Group Limited as its reference rate or, should there cease to be such a reference rate, the rate which that bank designates as being an appropriate substitute for the reference rate.~~

- (1) Is a reference to the 1 month Bank Bill Swap Reference Rate identified by AEMO on its website most recently determined by the Australian Financial Markets Association.
- (2) If the above rate ceases to exist, or that rate becomes, in AEMO's reasonable opinion, inappropriate, the interest rate is a rate determined and published by AEMO.

194 Payment of invoices

- (3) If the BB operator becomes aware that a tax invoice which it has issued under rule 193(b):
 - (a) is for an amount that is greater than the amount which should have been included on that invoice, and the BB shipper has paid that invoice, then the BB operator must re-pay that excess amount (at the option of the BB shipper) either by way of a credit on the tax invoice issued under rule 193(b) for the next invoice period or by a payment made to the BB shipper within 20 business days after the day the BB operator becomes aware of that overcharge, together with interest on that excess amount calculated at the applicable interest rate, accruing on a daily basis calculated on a simple interest basis, until the relevant tax invoice is issued or the relevant payment is made (as the case may be);

- (b) is for an amount that is less than the amount which should have been included on that invoice then, if the BB operator wishes to recover that underpayment, the BB operator must promptly give written notice to the BB shipper of the underpayment and give the BB shipper the option of:
- (i) having that underpayment included on the tax invoice issued under rule 193(b) for the next invoice period, together with interest calculated on that amount at the ~~applicable~~ interest rate, ~~accruing on a daily~~ calculated on a simple interest basis, until that tax invoice is issued; or
 - (ii) paying the amount of that underpayment within 20 business days after the day that notice is given to the BB shipper.

If the BB shipper does not make the payment referred to in subrule (3)(b)(ii) within the 20 business day period referred to in that rule then, in the absence of any agreement to the contrary with the BB operator, the BB shipper will be deemed to have chosen the option referred to in subrule (3)(b)(i).

- (4) Where a tax invoice is not disputed and the whole or any part of the amount included in that tax invoice has not been paid by the due date, the BB shipper must pay interest on that unpaid amount at the default interest rate of interest which is 2% per annum above the applicable interest rate, accruing on a daily calculated on a simple interest basis, until that amount has been paid.

195 Disputed invoices

- (3) If, as a result of the resolution of a disputed tax invoice under subrule (1), the BB operator is obliged to re-pay part or the whole of an amount received under rule 194 to a BB shipper, then the BB operator must re-pay the amount (at the option of the BB shipper) either by way of a credit on the tax invoice issued under rule 193(b) for the next invoice period or by a payment to the BB shipper within 20 business days after the day resolution is reached, together with interest on that amount calculated at the ~~applicable~~ interest rate, ~~accruing on a daily basis~~ calculated on a simple interest basis, until the relevant tax invoice is issued or the relevant payment is made (as the case may be).

Part 19 Declared Wholesale Gas Market Rules

200 Definitions

default interest rate means an interest rate of 2% above the interest rate

interest rate - see rule 203

203 Interest Rate

- (1) ~~A reference in this Part to the interest rate is a reference to the Bloomberg 1 month Bank Bill Swap Reference rate identified by AEMO on its website most recently published determined by the Australian Financial Markets Association in the Australian Financial Review.~~
- (2) If the above rate ceases to exist, or that rate becomes, in AEMO's reasonable opinion, inappropriate, the interest rate is a rate determined and published by AEMO.

238 Determination and payment of compensation claims

- (4) AEMO must pay interest on the amounts determined in accordance with subrule (1)(a) at the interest rate from the day following the date of the next payment of settlement amounts made under rule 247 following the determination of the Dispute resolution panel to the date when AEMO actually pays the Registered participant the amount of the compensation determined. Interest is to be ~~compounded daily~~ calculated on a simple interest basis.

- (5) If the Dispute resolution panel determines that an amount is payable in respect of compensation claimed by a Registered participant in accordance with rule 343 or 349, then AEMO is entitled to recover those payments in accordance with this rule and each Market Participant and the declared transmission system service provider must pay to AEMO an amount determined in accordance with this rule.
- (6) Market Participants and the declared transmission system service provider must pay interest on amounts determined in accordance with subrule (1)(b) at the interest rate from the day following the date of the next payment of settlement amounts following the determination of the Dispute resolution panel to the date when the Market Participant or the declared transmission system service provider actually pays the amount to AEMO. Interest is to be ~~compounded daily~~ calculated on a simple interest basis.

249 Revised statements

- (4) AEMO must issue to each Market Participant affected by a revision a revised statement for the relevant billing period within 5 business days of a revision made in accordance with subrule (1) or (2) or, as the case may be, resolution of a dispute referred to in subrule (3), setting out:
 - (a) the amount payable by the Market Participant to AEMO or, subject to rule 252, the amount payable by AEMO to the Market Participant; and
 - (b) the adjustment to the final statement as agreed or determined plus interest ~~(compounded daily)~~ at the interest rate for the period commencing on the payment date applicable to the final statement or previous revised statement to which the adjustment relates and ending on the payment date applicable to the revised statement. Interest is to be calculated on a simple interest basis.

253 Interest on overdue amounts

- (1) A Market Participant or AEMO must pay interest on any unpaid moneys due and payable by it under this Subdivision.
- (2) Subject to rules 238 and 249, the interest accrues at the default interest rate, calculated as simple interest on a daily basis, ~~compounding daily~~, from the date payment was due up to and including the date the payment is made.

Part 20 Short Term Trading Market Rules

364 Definitions

default interest rate means a rate of 2% above the interest rate

interest rate mean, at any time:

- (a) Is a reference to the Bloomberg 1 month Bank Bill Swap Reference Rate identified by AEMO on its website most recently determined by the Australian Financial Markets Association for the purposes of this Part, as most recently published in the Australian Financial Review; or
- (b) If no such rate is published or, in AEMO's reasonable opinion, appropriate, a replacement rate determined and published by AEMO. If the above rate ceases to exist, or that rate becomes, in AEMO's reasonable opinion, inappropriate, the interest rate is a rate determined and published by AEMO

466 Determination of payment claims

- (4) Interest is payable on amounts determined in accordance with subrule (1)(a) or (b), calculated on a daily basis at the interest rate, for the period commencing on the day after the next payment date under rule 470 occurring after the determination of the

Dispute resolution panel and ending on the date of payment of the relevant amount.
Interest is to be calculated on a simple interest basis.

473 Revised statements

- (5) Within 5 business days of a revision made in accordance with subrule (1) or (3) or, as the case may be, resolution of a dispute referred to in subrule (4), AEMO must make a revised statement for the relevant billing period available to each Trading Participant affected by that revision, setting out:
 - (a) the amount payable by the Trading Participant to AEMO or, subject to rule 475, the amount payable by AEMO to the Trading Participant; and
 - (b) the adjustment to the final statement as agreed or determined plus interest calculated on a daily basis at the interest rate for the period commencing on the day after the payment date applicable to the final statement to which the adjustment relates and ending on the payment date applicable to the revised statement. Interest is to be calculated on a simple interest basis with interest compounding monthly on the last day of each month while the unpaid moneys remain outstanding.

476 Interest on overdue amounts

- (1) A Trading Participant must pay interest on any unpaid moneys due and payable by it under this Subdivision, calculated as simple interest on a daily basis at the default interest rate for the period commencing on the date payment was due and ending on the date payment is made.
- (2) AEMO must pay interest on any unpaid moneys due and payable by it under this Subdivision, calculated as simple interest on a daily basis at the default interest rate for the period commencing on the date payment was due and ending on the date payment is made.