AEMO
AUSTRALIAN ENERGY MARKET OPERATOR

9 July 2012

FROM THE OFFICE OF THE
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Mr John Pierce
Chairman
Australian Energy Market Commission
PO Box A2449
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By online submission

Dear Mr ~~Pierce~~ John,

NEM Prudential Standard and Framework Draft rule Determination – ERC0133

AEMO appreciates the opportunity to respond to the AEMC's consultation on its draft rule determination for the National Electricity Amendment (New Prudential Standard and Framework in the NEM) Rule 2012. AEMO supports the AEMC's draft rule determination and appreciates the AEMC extending its consultation timeframes to allow AEMO's draft Credit Limit Procedures (CLP) consultation to be published prior to the AEMC's consultation closing. AEMO considers that this approach will assist Market Participants to understand the proposed market change and allow delivery of the change in the timeliest manner. AEMO commenced consultation on the draft CLP on 18 June 2012, and has taken care to align it with the draft rule.

In developing the draft CLP, AEMO has further reviewed the calculation of the prudential margin with a particular focus on the treatment of credit offsets during the reaction period. Currently, under schedule 3.3.2 and clause 3.3.8(e) of the draft rule; the calculation of prudential margin does not permit the inclusion of reallocation credits to be offset against load, however generation credits can be fully offset against load..

AEMO believes that the current offset arrangement does not appropriately reflect the respective prudential benefits of reallocation and generation credits, and that it is likely to overstate the benefit of generation and understate the benefit of credit reallocations. Depending on the circumstances, we are concerned that this could result in either an inefficient use of Market Participants' collateral, or could potentially impact AEMO's ability to ensure Market Participants' maximum credit limits meet the 2% probability of loss given default. Further detail of the offset arrangements is provided in Attachment 1.

After considering a number of options, AEMO considers it appropriate that credit offsets from both reallocations and generation be taken into account in the calculation of the prudential margin. However, the extent to which they are taken into account should be developed through the CLP to better reflect scenarios that could arise during the reaction period. This would require adjustment of the draft Rule to require AEMO to build an appropriate offset into the CLP, and to provide well targeted guidelines.

Based on our attached analysis, we anticipate that some generation offset should be accepted, but it should be limited in each case to account for the potential failure of any single generating facility traded by the Market Participant. In relation to reallocations, we consider that offset should be allowed through the full reaction period without any limitation, as we have not identified any realistic scenarios where a credit reallocation might be dissolved in that period – however, we suggest that the Rules should provide sufficient flexibility for incorporation of a limit on reallocation offsets should such a plausible scenario be identified.

Attachment 1 includes a consideration of options, and suggested principles that could be included in clause 3.3.8(e) of the draft rule.

AEMO encourages the Commission to consider further, and address the treatment of reallocation and generation offsets in the current rule consultation. Although it is acknowledged that this is an issue in the current prudential arrangements, the introduction of a new prudential standard runs the risk of exacerbating it unless it is explicitly dealt with, due to the inclusion of prudential margin in the calculation of a maximum credit limit. AEMO's recommendation is intended to strike the appropriate balance between ensuring efficient use of Market Participant collateral, and managing the risk of credit offsets being unavailable during the failure of a Market Participant.

If you have any questions regarding this submission, please do not hesitate to contact Terry Grimwade, Group Manager, Market Development on 03 9609 8520.

Yours sincerely

Matt Zema
Managing Director and Chief Executive Officer

Attachments: Analysis of Credit Offsets in the Prudential Margin

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Attachment 1 – Analysis of Credit Offsets in the Prudential Margin

1. Background

The prudential margin was introduced into the NEM prudential framework as part of the National Electricity Amendment (Reallocations) Rule 2007, to replace the previous arrangement that calculated the trading limit based on a fixed percentage of credit support. The prudential margin is a buffer into which the Market Participant is not permitted to trade, and represents collateral reserved to cover the period leading up to suspension of a Market Participant from the NEM following a default event, up to the time the accrual of any NEM liabilities is curtailed by transfer of its customers to another retailer (defined as the "reaction period").

1.1. Credit offsets in current rule

The current rules define a number of principles that are to be used in the determination of the prudential margin, as set out below:

> **S3.3.2 Principles for determining prudential margins**
>
> The value of the *prudential margin* for a *Market Participant* is set on the same principles as the *maximum credit limit* except that:
>
> 1. if the aggregate of all *trading amounts* for the *Market Participant* is a positive amount the quantity and pattern of those *trading amounts* are not taken into account when determining the *prudential margin;*
> 2. if the aggregate of all *reallocation amounts* for the *Market Participant* is a positive amount the quantity and pattern of those *reallocation amounts* are not taken into account when determining the *prudential margin*; and
> 3. the *prudential margin* is calculated in respect of the *reaction period.*

These principles are taken into account in AEMO's credit limits methodology, and the formula by which the prudential margin is calculated.

1.2. Credit offsets in draft rule

The calculation of prudential margin in the draft rule published by the AEMC reflects the proposed rule submitted by AEMO in the rule change proposal, and is specified in clause 3.3.8(e) as set out below:

> In determining the *prudential margin*, AEMO must not take into account estimates of a *Market Participant's*:
>
> 1. quantity and pattern of *trading amounts* where the estimate of the aggregate of all *trading amounts* for the period being assessed is a positive amount; and
> 2. quantity and pattern of *reallocation amounts* where the estimate of the aggregate of all *reallocation amounts* for the period being assessed is a positive amount.

In addition, the draft rule changes the calculation of maximum credit limit to be the sum of outstandings limit (OSL) and prudential margin (PM).

The remainder of this attachment sets out what changes AEMO proposes in relation to the draft Rule, and the associated rationale.

1.3. Credit offset scenarios

Credit offsets are used by Market Participants as a way of managing their prudential requirements. An example of this is where a retailer uses a reallocation with another Market Participant, with the retailer receiving credit reallocation amounts. These credit amounts reduce the Market Participant's settlement payment amounts, and consequently reduce the NEM's exposure to the failure of the retailer. Credit offsets are typically used in three situations:

1. A retailer that has credit reallocations to offset customer load.
2. A vertically integrated Market Participant (sometimes referred to as a "gentailer") that has credit trading amounts from generation to offset customer load.
3. A Reallocator that has credit reallocations to offset debit reallocations.

2. Calculation of credit limits under current arrangements

Table 1 summarises the current consideration of credit offsets for the calculation of prudential margin and maximum credit limit:

Table 1: Current consideration of credit offsets

	Calculation of prudential margin	**Calculation of maximum credit limit**
Retailer with credit reallocation amounts	Offsets not taken into account	Offsets are taken into account with 7 day reduction
Gentailer with credit trading amounts	Offsets are fully taken into account	Offsets are taken into account with 7 day reduction
Reallocator with credit reallocation amounts	Offsets are fully taken into account	Offsets are taken into account with 7 day reduction

These offset arrangements were reviewed by the AEMC in its Review into the Role of Hedging Contracts in the Existing NEM Prudential Framework (Hedging Review). In its Final Report the AEMC recommended that a rule change be progressed by the then Ministerial Council on Energy to remove the offsetting of generation by a gentailer.

The AEMC's recommendation was made on the basis that there is currently an inconsistency between the treatment of reallocation agreements and generation offsets, which has the potential to create a competitive advantage for gentailers over independent retailers without generation assets. The AEMC also identified that in the Reallocations Rule change, the Rule as made did not fully reflect the intent of the final Rule determination in respect to gentailer offsets.

A comparison of AEMO's findings to the AEMC's Hedging Review is presented in section 5.5

3. Calculation of prudential margin under draft rule

Table 2 summarises the draft rule consideration of credit offsets for the calculation of prudential margin and maximum credit limit:

Table 2: Draft rule consideration of credit offsets

	Calculation of prudential margin	Calculation of maximum credit limit
Retailer with credit reallocation amounts	Offsets not taken into account	Offsets are taken into account for OSL Offsets are not taken into account for PM
Gentailer with credit trading amounts	Offsets are fully taken into account	Offsets are fully taken into account for OSL and PM
Reallocator with credit reallocation amounts	Offsets are fully taken into account	Offsets are fully taken into account for OSL and PM

Through the analysis that AEMO has carried out in relation to the Credit Limit Procedure, it has identified that the arrangements under the draft rule further exacerbate the inconsistency in the consideration of generation and reallocation offsets. As identified in Table 1, the credit offset issue impacts the current calculation of prudential margin, but does not affect the calculation of maximum credit limit (where all credit offsets are assessed over a reduced time period). Under the draft Rule, the maximum credit limit is defined as the sum of outstandings limit and prudential margin, which will result in the credit offset issue impacting both prudential margin and maximum credit limit.

AEMO therefore believes that it is necessary for the credit offset arrangements to be reviewed as part of consideration of the draft rule.

4. Credit offsets during the reaction period

When considering the appropriate treatment of credit offsets in the calculation of prudential margin and maximum credit limit, the key factor is the expected behaviour of the offset during the reaction period.

The reaction period covers the time taken by AEMO to identify a default event against a Market Participant, and execute processes to transfer or remove further liabilities. During the reaction period a number of events may occur which result in the market's exposure to a Market Participant increasing or trending higher. AEMO is not in a position to predict the full scope of these events, when or how they might occur, or how they would affect exposure to the Market Participant. However AEMO has identified scenarios which might be considered more or less reasonable based on the prudential framework and possible operational factors.

The following section considers some of these scenarios.

5. Options considered for credit offsets

AEMO has considered a number of options for the treatment of credit offsets when calculating the prudential margin under the draft rule:

1. Offsets are not taken into account (No offset)
2. Offsets are fully taken into account (Full offset)

3. Offsets are taken into account, however the amount of offset is limited by predetermined risk factors (Reduced offset)

5.1. No offset

An arrangement of no offsets would be consistent with a scenario where it is reasonable to assume that all credit offsets with all counterparties would cease immediately at the start of the reaction period.

Table 3 considers the scenarios under which no offsets could be considered:

Table 3: No offset scenarios

Credit Reallocations	Generation
Two-party failure with exclusivity: Where a generator fails and is defaulted, and AEMO decides to deregister reallocations and perform an immediate MCL review on the retail counterparty who only has reallocations with that generator. Subsequent failure by the retailer would result in no credit reallocation offsets from the start of the retailer's reaction period. Consistent with the AEMC's findings in their Hedging Review, AEMO does not consider this scenario to be reasonably possible.	**Generation failure:** Where a gentailer experiences a loss of all generation at the start of the reaction period. This could be the result of technical failure, or a force majeure event such as an industrial relations dispute. This scenario is only considered as reasonably possible when a Market Participant has a small number of facilities that are sufficiently related to make a common failure plausible.

Based on the scenarios considered above, the arrangement of not allowing any credit offsets in the prudential margin is not credible, except for a gentailer with a single facility.

5.2. Full offset

An arrangement of full offsets would be consistent with a scenario where it is reasonable to assume that all credit offsets would continue until AEMO has been able to curtail all liabilities. For a retailer, liabilities are expected to cease once Retailer of Last Resort (RoLR) processes have been effected.

Table 4 considers the scenarios under which full offsets could be considered:

Table 4: Full offset scenarios

Credit Reallocations	Generation
Reallocation is firm: Where a credit reallocation remains registered until at least the point of RoLR. This scenario is considered reasonably probable, as it is unlikely that a reallocation could be unilaterally deregistered by either party. AEMO has the discretion to deregister a reallocation immediately a default event	**Generation output is firm:** Where a gentailer continues to operate all generation facilities until the point of RoLR. This scenario is considered reasonably probable, as a gentailer is likely to have a financial incentive to continue generating both under operation of the Market Participant or by an external administrator.

occurs, but is likely to allow the reallocation to continue until the point of RoLR in order to minimise the exposure to the NEM.	

Based on the scenarios considered above, the arrangement of allowing full credit offsets in the prudential margin is credible.

5.3. Reduced offset

An arrangement of reduced offsets would be consistent with a model where it is reasonable to assume that some credit offsets would continue until AEMO has been able to curtail all liabilities. For a retailer, liabilities are expected to cease once Retailer of Last Resort (RoLR) processes have been completed.

Table 5 considers the scenarios under which reduced offsets could be considered:

Table 5: Reduced offset scenarios

Credit Reallocations	Generation
Two-party failure: Similar to Table 3, however the retailer may have reallocations with other Market Participants, so that the retailer still has some credit reallocations during the reaction period. As per Table 3, this scenario is not considered as reasonably possible	**Reduced generation output:** Where a gentailer continues to operate some of their generation facilities during the reaction period. This scenario is considered reasonably probable and, in some cases, the loss of generating units, or an entire facility, could be a contributing factor in the failure of a gentailer. However, while it is possible that one or more generation facilities may be unavailable, or operate at reduced capacity, during the reaction period, AEMO considers it unreasonable to assume that multiple, geographically separate and separately operated facilities would all cease to operate for the duration of the reaction period.

Based on the scenarios considered above, the potential for gentailers to have reduced generation output available in the reaction period represents a credible scenario. Hence, it is considered appropriate to make some allowance for reduced creditoffsets in the prudential margin. While, as argued in section 5.1, it is not considered credible that, other than those with limited numbers of related generation facilities, gentailers would have none of their generation output available throughout the reaction period, it is considered reasonable to make allowance, in determining the prudential margin, to make provision for complete loss of a gentailer's single largest generation facility for the entire reaction period.

5.4. Summary of findings

After considering the scenarios that may affect credit offsets during the reaction period, AEMO has concluded that the following offsets are appropriate:

- Credit reallocations are fully taken into account in both the OSL and PM.

- Generation is fully taken into account for the OSL, however the amount of generation taken into account for the PM is limited to reflect a situation where the Market Participant's largest generating facility is unavailable.

Table 6 summarises the impact of the above findings for the calculation of prudential margin and maximum credit limit performed under the draft rule:

Table 6: Impact of findings on credit offsets under the draft rule

	Calculation of prudential margin	Calculation of maximum credit limit
Retailer with credit reallocation amounts	Offsets are fully taken into account	Offsets are fully taken into account for MCL
Gentailer with credit trading amounts	Offsets are taken into account but limited to reflect failure of largest generating facility	Offsets are fully taken into account for OSL, but limited to reflect failure of largest generating facility in PM
Reallocator with credit reallocation amounts	Offsets are fully taken into account	Offsets are fully taken into account for MCL

5.5. Comparison of findings to Hedging Review

In the AEMC's Hedging Review, it was recommended that credit offsets from both reallocations and generation not be permitted. AEMO understands that this position followed from the AEMC's consideration of the inconsistency between offsets from reallocations and generation. As a baseline, reallocations do not currently provide any offset to load in the calculation of prudential margin, and the AEMC's recommendation, to prevent generation from being used as an offset, aligned with this. It is also noted that the AEMC's review was performed under the current prudential framework, which is based on a "reasonable worst case" performance guideline for prudentials.

In the context of the new prudential standard and associated procedures, however, it has been necessary for AEMO to consider the matter of offsets in the reaction period from first principles. This has been done by considering what scenarios would suggest that it is reasonable to allow some offsets from either reallocations or generation. In a similar vein to the AEMC's Hedging Review, AEMO's approach has also ensured that the treatment of offsets for reallocations and generation are derived on a consistent basis.

It is also relevant to note that in reviewing offsets under the proposed CLP, the impact of offsets needs to be considered against the new prudential standard definition of 2% probability of loss given default.

6. Suggested changes to the draft rule

AEMO's proposed approach to the treatment of generation and reallocation offsets is based on its assessment of credible scenarios, and AEMO acknowledges that this needs to be tested with stakeholders. Furthermore, consistent with the structure of the draft rule as it stands, we consider it is appropriate for the detail of this position to be reached through development of the CLP rather than being specified in detail in the rule.

It is, therefore, recommended that the rule be drafted in such a way to allow flexibility in incorporating potential scenarios that may limit the ability for reallocation and generation offsets to effectively manage prudential requirements.

AEMO has drafted a clause which is suggested to replace the existing clause 3.3.8(e) in the draft rule. This clause establishes the principles that would allow AEMO to limit credit offsets where there is a reasonable probability that the offset may not be effective during the reaction period. The suggested clause 3.3.8(e) is as follows:

> In determining the *prudential margin*, AEMO must take into consideration the following factors:
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> 1. where AEMO considers there to be a risk that a *Market Participant's prospective reallocations* may cease or be deregistered during the *reaction period*, the corresponding *reallocation amounts* must be reduced accordingly;
> 2. where AEMO considers there to be a risk that a *Market Participant's* positive *trading amounts* may cease during the *reaction period*, the corresponding positive *trading amounts* must be reduced accordingly; and
> 3. in assessing the risk, AEMO will have regard to the prudential standard.
> 4. The *prudential margin* cannot be negative.