

MARKET PROCEDURE: PRUDENTIAL REQUIREMENTS

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VERSION RELEASE HISTORY

Version	Effective Date	Summary of Changes
1.0	12 September 2006	Market Procedure for Prudential Requirements
2.0	15 October 2008	Amendments to Market Procedure resulting from PC_2008_08
3.0	1 May 2014	Amendments to Market Procedure resulting from PC_2013_04
4.0	30 November 2015	Changes resulting from the transfer of functions from the IMO to AEMO
5.0	18 April 2017	Changes resulting from the transfer of System Management functions to AEMO
6.0	27 June 2019	<ul style="list-style-type: none"> Changes resulting from Procedure Change Proposal AEPC_2019_03 related to the Rule Change Proposal RC_2017_06: Reduction of the prudential exposure in the Reserve Capacity Mechanism Changes to Credit Support arrangements to reflect Security Deposit deeds and directions Updates to reflect AEMO's new Market Procedure template
7.0	9 December 2019	Changes resulting from Procedure Change Proposal AEPC_2019_11. These changes are an update to the calculation of the anticipated maximum exposure for a Market Participant for which at least three full months of Non-STEM settlement data is available
<u>8.0</u>	<u>TBC</u>	<u>Changes resulting from AEPC 2020 xx to improve the accuracy of the calculation of a Market Participant's Outstanding Amount</u>

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1. INTRODUCTION

1.1. Purpose and scope

- 1.1.1. This is the Market Procedure: Prudential Requirements (Procedure) made in accordance with AEMO's functions under clause 2.1A.2(h) of the Wholesale Electricity Market Rules (WEM Rules). This Procedure is also made under clause 2.43.1 of the WEM Rules.
- 1.1.2. This Procedure has effect only for the purposes set out in the WEM Rules and the WEM Rules prevail over ~~these Procedures~~ this Procedure to the extent of any inconsistency.
- 1.1.3. The purpose of this Procedure is to outline:
- (a) how AEMO will determine Credit Limits;
 - (b) the arrangements for Credit Support, including:
 - (i) the form of acceptable guarantees and bank undertakings;
 - (ii) where and how AEMO will hold cash deposits and how the costs and fees of holding cash deposits will be met; and
 - (iii) the application of monies drawn upon from Credit Support in respect of amounts owed by the relevant Market Participant to AEMO;
 - (c) how AEMO will assess persons against the Acceptable Credit Criteria;
 - (d) how AEMO will calculate Trading Margins;
 - (e) how AEMO will issue Margin Calls;
 - (f) the factors to be taken into account to determine the expected value of transactions; and
 - (g) other matters relating to Credit Limits, Credit Support, Trading Limits, the Outstanding Amount, Trading Margins and Margin Calls under sections 2.37 to 2.42 of the WEM Rules.
- 1.1.4. In this Procedure, where obligations are conferred on a Rule Participant, that Rule Participant must comply with the relevant obligations in accordance with clauses 2.9.7, 2.9.7A, 2.9.7B, 2.9.7C and 2.9.8 of the WEM Rules, as applicable.
- 1.1.5. Reference to particular WEM Rules within the Procedure in bold and square brackets **[clause XX]** are included for convenience only and are not part of this Procedure.

1.2. Definitions and Interpretation

- 1.2.1. Terms defined in the WEM Rules have the same meanings in this Procedure, unless otherwise specified in this clause. The words, phrases and abbreviations in Table 1 have the meanings set out opposite them when used in this Procedure.

Table 1 Defined terms

Term	Definition
Ancillary Service Settlement	The process of calculating a Rule Participant's net settlement amount for all transactions and amounts pertaining to their Ancillary Service settlement amount in accordance with section 9.9 of the WEM Rules and reflected in the Non-STEM Settlement Statement for the Trading Month.

Term	Definition
Balancing Settlement	The process of calculating a Rule Participant's net settlement amount for all transactions and amounts pertaining to their Balancing Settlement amount in accordance with section 9.8 of the WEM Rules and reflected in the Non-STEM Settlement Statement for the Trading Month.
Credit Support Effective Date	For a Market Participant, the date determined by AEMO by which the Market Participant's Credit Support must become duly effective.
Due Date	The date specified by AEMO in respect of a step in this Market Procedure.
Market Participant Fee Settlement	The process of calculating a Rule Participant's net settlement amount for all transactions and amounts pertaining to its fees associated with the services provided by AEMO (including in its capacity as System Management), and the Economic Regulation Authority as described in section 2.24 of the WEM Rules, in accordance with section 9.13 of the WEM Rules and reflected in the Non-STEM Settlement Statement for the Trading Month.
Non-Short Term Energy Market (Non-STEM) Settlement	The process of calculating a Rule Participant's net settlement amount for all transactions and amounts, other than those pertaining to the STEM, in accordance with section 9.14 of the WEM Rules.
Outage Compensation Settlement	The process of calculating a Rule Participant's net settlement amount for all transactions and amounts pertaining to its Outage compensation settlement amount in accordance with section 9.10 of the WEM Rules, which is reflected in the Non-STEM Settlement Statement for the Trading Month.
Reconciliation Settlement	The process of calculating a Rule Participant's net settlement amount for all transactions and amounts pertaining to their reconciliation settlement amount in accordance with section 9.11 of the WEM Rules, which is reflected in the Non-STEM Settlement Statement for the Trading Month.
Reserve Capacity Settlement	The process of calculating a Rule Participant's net settlement amount for all transactions and amounts pertaining to their Reserve Capacity settlement amount in accordance with section 9.7 of the WEM Rules, which is reflected in the Non-STEM Settlement Statement for the Trading Month.
STEM Settlement	The process of calculating a Rule Participant's net settlement amount for all transactions and amounts pertaining to their STEM settlement amount in accordance with section 9.6 of the WEM Rules, which is reflected in the STEM Settlement Statement for the Trading Week.
Treasury Corporation	A central borrowing authority of an Australian State or Territory, of which authority has been established by an Act of Parliament of that State or Territory.
Wholesale Electricity Market System (WEMS)	AEMO's IT interface used to administer, operate and settle the Wholesale Electricity Market (WEM).

1.2.2. The following principles of interpretation apply to this Procedure, unless otherwise expressly indicated:

- a) references to time are references to Australian Western Standard Time;
- b) terms that are capitalised, but not defined in this Procedure, have the meaning given in the WEM Rules;
- c) to the extent that this Procedure is inconsistent with the WEM Rules, the WEM Rules prevail to the extent of the inconsistency;
- d) a reference to the WEM Rules or Market Procedures includes any associated forms required or contemplated by the WEM Rules or Market Procedures; ~~and~~

e) words expressed in the singular include the plural and vice versa; and

~~1.2.3-f)~~ In this Procedure the conventions specified in sections 1.3 to 1.5 of the WEM Rules apply.

~~1.2.4.1.2.3.~~ The appendices contained within this Procedure form part of the Procedure and are legally enforceable.

~~1.2.5.1.2.4.~~ AEMO may, in its absolute discretion, amend and publish on the Market Web Site, any market documents and user guides listed in step 1.3.1.

~~1.2.6.1.2.5.~~ A Market Participant, wishing to use any market document listed in step 1.3.1, must ensure that it downloads the current version from the Market Web Site.

~~1.2.7.1.2.6.~~ If AEMO amends and publishes a market document listed in step 1.3.1, prior to a Market Participant's provision of Credit Support under this Procedure, AEMO must apply the amended and published version of that market document to assess compliance of the Credit Support.

1.3. Related Documents

1.3.1. The following Market Procedures, market documents and user guides (available on the Market Web Site¹) provide background information to this Procedure:

- (a) Market Procedure: Rule Participant Registration and Deregistration;
- (b) Market Procedure: Settlement;
- (c) Market Procedure: Reserve Capacity Security;
- (d) Market Procedure: Notices and Communications;
- (e) Market Procedure: Information Confidentiality;
- (f) Proforma deeds for:
 - (i) Bank undertaking for Credit Support;
 - (ii) Guarantee for Credit Support;
 - (iii) Security Deposit for Credit Support;
 - (iv) Security Deposit for Credit Support (provided by third party); and
 - (v) Voluntary prepayments;
- (g) Change of contact details form;
- (h) Contact details of guarantee/bank undertakings form;
- (i) Security Deposit instructions;
- (j) Acceptable Credit Criteria form;
- (k) List of entities meeting the Acceptable Credit Criteria; ~~and~~
- ~~(l)~~ WEMS MPI User Guide; and
- ~~(m)~~ WEM Metering, Settlement and Prudential Calculations.

¹ Available at <http://aemo.com.au/Electricity/Wholesale-Electricity-Market-WEM/Procedures>.

2. CREDIT LIMITS [CLAUSE 2.37.4]

2.1. Credit Limit Determination

- 2.1.1. When determining, reviewing and revising a Market Participant's Credit Limit in accordance with clauses 2.37.2 and 2.37.3 of the WEM Rules, AEMO must take into account the principles laid out in clause 2.37.4 [clause 2.37.1].
- 2.1.2. AEMO must apply clause 2.37.4 of the WEM Rules as follows:
- (a) For a Market Participant for which at least three full months of data from the Non-STEM Settlement process is available, AEMO must determine a Credit Limit in accordance with step 2.2.
 - (b) For a Market Participant for which less than three full months of data from the Non-STEM Settlement process is available, AEMO must determine an initial Credit Limit in accordance with step 2.3.

2.2. Credit Limit Determination for a Market Participant for which At Least Three Full Months of Non-STEM Settlement Data is Available

- 2.2.1. When reviewing or revising a Market Participant's Credit Limit in accordance with clauses 2.37.2 or 2.37.3 of the WEM Rules, AEMO must determine the Credit Limit as the sum of the anticipated maximum exposure (AME) determined in step 2.2.2 and any amount determined in step 2.2.3.
- 2.2.2. AEMO must determine a Market Participant's AME using up to 24 months of available STEM Settlement and Non-STEM Settlement data from the period preceding the date on which the Credit Limit is determined, in the order listed below:
- (a) For each invoiced Trading Month for Non-STEM Settlement Statements, AEMO must calculate the Trading Day Non-STEM Settlement exposure for each Trading Day of the Trading Month for the Market Participant. This Trading Day Non-STEM Settlement exposure is calculated as:

$$\left\{ \frac{RCSA(p, m) + ASSA(p, m) + COCSA(p, m) + RSA(p, m) + MPFSA(p, m)}{n} + \sum_{t=1}^{48} BSA(p, d, t) \right\}$$

where:

$RCSA(p, m)$ is the Reserve Capacity Settlement amount for Market Participant p for Trading Month m calculated in accordance with clause 9.7.1 of the WEM Rules and the Market Procedure: Settlement;

$ASSA(p, m)$ is the Ancillary Service Settlement amount for Market Participant p for Trading Month m calculated in accordance with clause 9.9.1 of the WEM Rules and the Market Procedure: Settlement;

$COCSA(p, m)$ is the Outage Compensation Settlement amount for Market Participant p for Trading Month m calculated in accordance with clause 9.10.1 of the WEM Rules and the Market Procedure: Settlement;

$RSA(p, m)$ is the Reconciliation Settlement amount for Market Participant p for Trading Month m calculated in accordance with clause 9.11.1 of the WEM Rules and the Market Procedure: Settlement;

$MPFSA(p, m)$ is the applicable Market Participant Fee Settlement amount for Market Participant p for Trading Month m calculated in accordance with clause 9.13.1 of the WEM Rules and the Market Procedure: Settlement;

$\sum_{t=1}^{48} BSA(p, d, t)$ is the sum of the Balancing Settlement amounts for Market Participant p for all Trading Intervals t of Trading Day d calculated in accordance with clause 9.8.1 of the WEM Rules and the Market Procedure: Settlement; and

n is the number of Trading Days in Trading Month m .

- (b) Using the Trading Day Non-STEM Settlement exposure, AEMO must calculate the total running 70-day exposure, for all consecutive 70-day periods from the last day of the most recently settled Trading Month up to a maximum of 24 months prior to the time of calculation.
- (c) AEMO must determine the highest running 70-day exposure as the Market Participant's maximum exposure in the Non-STEM Settlement process.
- (d) If the Market Participant participated in the STEM over that period, AEMO must also calculate the Trading Day STEM exposure for the Market Participant. This is calculated as:

$$\left\{ \frac{STEMSA(p, w)}{m} \right\}$$

where:

$STEMSA(p, w)$ is the STEM Settlement amount for Market Participant p for Trading Week w calculated in accordance with clause 9.6.1 of the WEM Rules and the Market Procedure: Settlement; and

m is the number of Trading Days in Trading Week w .

- (e) Using the Trading Day STEM exposure, AEMO must calculate the total running 15-day exposure, for all consecutive 15-day periods from the last day of the most recently settled Trading Week up to a maximum of 24 months prior to the time of calculation.
- (f) AEMO must determine the highest running 15-day exposure as the Market Participant's maximum exposure in the STEM Settlement process.
- (g) The AME is the sum of the 70-day maximum Non-STEM Settlement exposure and 15-day maximum STEM Settlement exposure.

2.2.3. In addition to the amount determined in step 2.2.2, AEMO may, in its absolute discretion, decide to apply an amount determined in accordance with:

- (a) clause 2.37.5(k) of the WEM Rules, which outlines that AEMO may take into account any other factor (in addition to those listed in clause 2.37.5(a) to (j) of the WEM Rules), it considers relevant in determining the Market Participant's Credit Limit; or

- (b) clause 2.37.6 of the WEM Rules which outlines that, in determining a Market Participant's Credit Limited under clause 2.37.4 of the WEM Rules, AEMO may, to the extent it considers relevant, take into account a minimum amount that it considers would adequately protect the WEM if a Suspension Event were to occur in relation to that Market Participant.

2.3. Credit Limit Determination for a Market Participant for which Less Than Three Months of Non-STEM Settlement Data is Available

- 2.3.1. For a Market Participant for which less than three full months of Non-STEM Settlement data, or no data², is available, AEMO must determine an initial Credit Limit for that Market Participant in accordance with step 2.3.2.
- 2.3.2. AEMO must determine the type of Market Participant in accordance with Table 2 and set the Market Participant's initial Credit Limit as the sum of:
- (a) the amount determined under steps 2.4, 2.5 or 2.6 as applicable; and
 - (b) any amount that AEMO may in its absolute discretion, decide to apply in accordance with:
 - (i) clause 2.37.5(k) of the WEM Rules which outlines that AEMO may take into account any other factor (in addition to those listed in clause 2.37.5(a) to (j)), it considers relevant in determining the Market Participant's Credit Limit; or
 - (ii) clause 2.37.6 of the WEM Rules which outlines that, in determining a Market Participant's Credit Limited under clause 2.37.4, AEMO may, to the extent it considers relevant, take into account a minimum amount that it considers will adequately protect the WEM if a Suspension Event were to occur in relation to that Market Participant.

Table 2 **Applicable section by Market Participant type**

	Type of Market Participant	Sections in this Procedure
(a)	Market Generator adding one or more new Facilities	Section 2.4
(b)	Market Customer adding one or more new end-consumers or Loads	Section 2.5
(c)	Market Participant that is both a Market Generator and a Market Customer and is adding one or more new Facilities, end-consumers or Loads	Sum of the amounts determined at (a) and (b) in this table (after offsetting positive and negative amounts)
(d)	Market Participant with a Demand Side Programme (DSP) ³ adding one or more new DSPs	Sum of the amounts determined at (a), (b) and (c) in this table, if applicable, and Section 2.6 (after offsetting positive and negative amounts)

² All new Market Participants will fall into this category and will have an initial Credit Limit determined for them in accordance with step 2.3.2.

³ Note that under the WEM Rules, a Market Participant electing to register a Demand Side Programme must register itself as a Market Customer. More details on Market Participant registration are available in the Market Procedure: Rule Participant Registration and De-registration.

- 2.3.3. For a new Market Participant or an existing Market Participant adding one or more new Facilities, Loads or DSPs, if AEMO determines that at least three full months of Non-STEM Settlement data has become available and a Credit Limit review or revision is required, AEMO must determine the Market Participant's Credit Limit under section 2.2 of this Procedure.

2.4. Credit Limit Determination for a Market Generator Adding One or More New Facilities

- 2.4.1. If not already submitted at the time of Facility registration, or not readily available to AEMO, a new or existing Market Generator adding one or more new Facilities must, by the Due Date, provide the following data to AEMO:
- (a) the MW value for the minimum stable generation and the maximum Sent Out Capacity for each Facility;
 - (b) the MW quantity of Certified Reserve Capacity for each Facility;
 - (c) the actual or estimated quantity of energy in MWh to be sold under Bilateral Contracts;
 - (d) the MW quantity corresponding to the number of actual or estimated Capacity Credits it intends to trade bilaterally; and
 - (e) the actual or estimated quantity of energy in MWh to be provided for Ancillary Services.
- 2.4.2. AEMO must reasonably estimate the following:
- (a) the average Balancing Price over the 70 Trading Days prior to the Credit Limit determination;
 - (b) the Ancillary Service Settlement amount, as applicable to the Market Generator;
 - (c) the percentage of time that each Facility is expected to run;
 - (d) the Monthly Reserve Capacity Price;
 - (e) the percentage of Forced Outages that each Facility is likely to experience; and
 - (f) the applicable refund rate calculated in accordance with clause 4.26.1 of the WEM Rules.
- 2.4.3. Based on the data provided in step 2.4.1 and estimates determined in step 2.4.2, AEMO must reasonably assume the following:
- (a) the maximum quantity of the energy to be bought in the STEM or Balancing Market over 70 Trading Days;
 - (b) the maximum amount of Market Participant Fees and Ancillary Service payments over 70 Trading Days; and
 - (c) the maximum quantity of capacity expected to be on an Outage over 70 Trading Days.
- 2.4.4. Using the assumptions in step 2.4.3, AEMO must determine an initial Credit Limit for the new or existing Market Generator adding one or more new Facilities.

2.5. Credit Limit Determination for a Market Customer Adding One or More New End-Consumers or Loads

- 2.5.1. If not already submitted at the time of Market Participant registration, or not readily available to AEMO, a new or existing Market Customer adding one or more new end-consumers or Loads

must, by the Due Date, provide the following data to AEMO:

- (a) the actual or forecast quantity of energy in MWh contracted to sell to Load(s);
- (b) the actual or estimated quantity of energy in MWh to be purchased under Bilateral Contracts; and
- (c) the MW quantity corresponding to the number of actual or estimated Capacity Credits it intends to trade bilaterally.

2.5.2. AEMO must reasonably estimate the following:

- (a) the average Balancing Price over the 70 Trading Days prior to the Credit Limit determination;
- (b) the Ancillary Service Settlement amount, as applicable to the Market Customer;
- (c) the Monthly Reserve Capacity Price; and
- (d) the Individual Reserve Capacity Requirement for the Market Customer.

2.5.3. Based on the data provided in step 2.5.1 and estimates determined in step 2.5.2, AEMO must reasonably assume the following:

- (a) the maximum quantity of energy to be bought in the STEM or Balancing Market over 70 Trading Days;
- (b) the maximum amount of Market Participant Fees and Ancillary Service payments over 70 Trading Days; and
- (c) the maximum quantity of Capacity Credits to be bought from AEMO over 70 Trading Days.

2.5.4. Using the assumptions in step 2.5.3, AEMO must determine an initial Credit Limit for the new or existing Market Customer adding one or more new end-consumers or Loads.

2.6. Credit Limit Determination for a Market Participant Adding One or More New DSPs

2.6.1. If not already submitted at the time of Market Participant registration, or not readily available to AEMO, a new or existing Market Participant adding one or more new DSPs must, by the Due Date, provide the following data to AEMO:

- (a) the sum of the expected minimum consumption of all Associated Loads for the DSP in MW and the meter identification number of each Load to be associated;
- (b) the MW value of Certified Reserve Capacity for the DSP that AEMO reasonably expects is likely to be available during its nominated periods of availability, after netting off capacity required to serve minimum consumption;
- (c) the nominated periods of availability of the DSP; and
- (d) the MW quantity corresponding to the number of actual or estimated Capacity Credits it intends to trade bilaterally.

2.6.2. AEMO must reasonably estimate the following:

- (a) the total MW value of Capacity Credits assigned to all of the Market Participant's DSPs;
- (b) the total MW value of Reserve Capacity Deficit of all of the Market Participant's DSPs;

- (c) the total MW value of capacity of all of the Market Participant's DSPs potentially unavailable over 70 Trading Days;
 - (d) the Monthly Reserve Capacity Price; and
 - (e) the applicable refund rate calculated in accordance with clause 4.26.1 of the WEM Rules.
- 2.6.3. Using the estimates in step 2.6.2, AEMO must determine an initial Credit Limit for a Market Participant adding one or more new DSPs.

2.7. Notifying a Market Participant of its Credit Limit

- 2.7.1. As soon as practicable after determining a Market Participant's Credit Limit, AEMO must notify the Market Participant in writing:
- (a) of the amount of its Credit Limit [clause 2.37.7], including;
 - (b) details of the basis for the determination of the Credit Limit, with specific references to the factors, specified in clause 2.37.5 of the WEM Rules and this Procedure [clause 2.37.7] and any amount considered under clause 2.37.6 of the WEM Rules, that AEMO must take into account when determining the Market Participant's Credit Limit;
 - (c) whether it is required to submit Credit Support and, if applicable, a Due Date by which a Credit Support arrangement must be submitted; and
 - (d) the Credit Support Effective Date determined by AEMO under step 3.3.1 by which the Market Participant's Credit Support must become duly effective.

2.8. Changes in Circumstances Affecting a Market Participant's Credit Limit

- 2.8.1. In accordance with clause 2.37.8(a) of the WEM Rules, a Market Participant must notify AEMO as soon as practicable, in writing, where it becomes aware that any change in its circumstances may result in an increase in its Credit Limit. Such circumstances include, but are not limited to:
- (a) For a Market Customer:
 - (i) Expected increases in metered consumption quantities;
 - (ii) Acquisition of new end-consumers, Loads or DSPs; or
 - (iii) Expected decreases in the quantity of electricity purchased bilaterally.
 - (b) For a Market Generator:
 - (i) Expected decreases in metered generation quantities;
 - (ii) Acquisition of new Facilities;
 - (iii) Expected decreases in the quantity of electricity sold bilaterally; or
 - (iv) Material fuel supply disruptions.
 - (c) Any other event that may affect a Market Participant's commercial position in the market.
- 2.8.2. In accordance with clause 2.37.8(b) of the WEM Rules, a Market Participant may notify AEMO in writing, of any change in its circumstances that may result in a decrease in its Credit Limit. The Market Participant must provide reasons and evidence for requesting a decrease in its Credit Limit.

- 2.8.3. Within five Business Days of the receipt of a notification under step 2.8.1 or step 2.8.2, AEMO must decide whether to:
- (a) revise a Market Participant's Credit Limit, in which case AEMO must, within 30 Business Days, determine the revised Credit Limit in accordance with step 2.2 or step 2.3, as applicable; or
 - (b) reject a Market Participant's request for revision of its Credit Limit, in which case AEMO must notify the Market Participant of its reasons for rejecting the request in writing.

3.1. Credit Support Delivery Process

3.2. Amount of Credit Support

- 3.2.1. Where a Market Participant receives a notification under step 2.7.1 requesting the submission of Credit Support, the Market Participant must ensure that AEMO holds the benefit of Credit Support that is an amount not less than the most recently determined Credit Limit notified by AEMO [clause 2.38.1(b)].

3.3. Credit Support Effective Date

- 3.3.1. Before a Market Participant transacts in the market, it must meet its obligations under the WEM Rules and this Procedure such that its Credit Support becomes duly effective by the Credit Support Effective Date.
- 3.3.2. AEMO must determine the Credit Support Effective Date by which a Market Participant's Credit Support must become duly effective as follows:

	Type of Market Participant	Credit Support Effective Date
(a)	New Market Generator	Before the Facility undertakes a Commissioning Test
(b)	Existing Market Generator adding one or more new Facilities	Before the new Facility undertakes a Commissioning Test
(c)	New Market Customer	After evidence of an approved electricity transfer access contract is provided to AEMO and before the Market Customer participates in the market
(d)	Existing Market Customer adding one or more new end-consumers or Loads	Before the date notified by AEMO (which AEMO determines based on the Market Participant's notification of an expected increase in consumption, as per its obligation in step 2.8.1(a))
(e)	New or existing Market Participant adding one or more DSPs	Before the DSP's Reserve Capacity Obligation Quantity becomes applicable under 4.1.26 of the WEM Rules

3.4. Maintaining Credit Support

- 3.4.1. Where a Market Participant's Credit Support is due to expire or cease to have effect for any other reason, then that Market Participant must ensure that AEMO holds the benefit of replacement Credit Support that becomes effective when the existing Credit Support expires or otherwise ceases to have effect [clause 2.38.2(c)].
- 3.4.2. Where a Market Participant's Credit Support is affected by any of the circumstances laid out in step 3.4.4, it must:
- (a) notify AEMO in writing immediately; and
 - (b) ensure that AEMO holds the benefit of replacement Credit Support that is in the form specified in clause 2.38.4 of the WEM Rules, in an amount not less than its most recently determined Credit Limit, and effective before the end of the next Business Day or within any

longer period that AEMO has approved in writing (under step 3.4.6), after the Market Participant first becomes aware of the relevant change in circumstances [clause 2.38.3].

- 3.4.3. Where AEMO becomes aware of any circumstance (as specified in step 3.4.4) in relation to a Market Participant, it must:
- (a) notify the Market Participant in writing immediately; and
 - (b) require the Market Participant to provide a replacement Credit Support that is in the form specified in clause 2.38.4 of the WEM Rules, in an amount not less than its most recently determined Credit Limit and effective before the end of the next Business Day or within any longer period that AEMO has approved in writing under step 3.4.6 [clause 2.38.3].
- 3.4.4. For the purposes of clause 2.38.3 of the WEM Rules, circumstances that may require replacement Credit Support in step 3.4.2 or 3.4.3 include, but are not limited to, where:
- (a) existing Credit Support is no longer current or valid;
 - (b) the Credit Support provider no longer meets any one of the Acceptable Credit Criteria;
 - (c) some or all of the existing Credit Support has been drawn upon by AEMO;
 - (d) the Credit Support provider ceases to, or threatens to cease to, carry on providing Credit Support in relation to the Market Participant; or
 - (e) the Credit Support provider in relation to the Market Participant becomes insolvent or is dissolved.
- 3.4.5. A Market Participant requesting AEMO to provide the replacement Credit Support after the end of the next Business Day under steps 3.4.2(b) or 3.4.3(b), must request an extension of the Due Date for providing replacement Credit Support in writing.
- 3.4.6. AEMO may, in its absolute discretion, approve or reject a Market Participant's request for an extension in step 3.4.5. AEMO must provide its decision in writing to the Market Participant as soon as practicable.

3.5. Withdrawing Credit Support

- 3.5.1. If a review by AEMO of a Market Participant's Credit Limit under step 2.1.1 results in AEMO notifying the Market Participant that the required Credit Support is lower than its existing Credit Support held with AEMO, the Market Participant may elect (in writing) to withdraw an amount to decrease its Credit Support held with AEMO to an amount not less than its most recently determined Credit Limit amount.
- 3.5.2. A Market Participant must make a request to AEMO in writing for withdrawal of its Credit Support. The processes to be followed by AEMO and the Market Participant will be agreed upon following the Market Participant's request for withdrawal.

3.6. Credit Support Arrangements

- 3.6.1. A Market Participant must ensure that the form of its Credit Support meets the requirements of clause 2.38.4 of the WEM Rules.

- 3.6.2. A Market Participant must provide Credit Support in the form of either a:
- (a) guarantee or bank undertaking, in accordance with the process detailed in the steps in section 3.7 of this Procedure and meeting the requirements in clause 2.38.4(a) of the WEM Rules; or
 - (b) Security Deposit, in accordance with the process detailed in the steps in section 3.8 of this Procedure and meeting the requirements in clause 2.38.4(b) of the WEM Rules.
- 3.6.3. A Market Participant must ensure that the contact details it submits for its Credit Support arrangements are current at all times. This includes contact details for persons at the Treasury Corporation or other entity that meets the Acceptable Credit Criteria to be provided in the contact details of guarantee/bank undertakings form. The Market Participant must update these contact details by updating the contact details on the guarantee or bank undertaking and sending it to wa.operations@aemo.com.au.

3.7. Submitting Guarantees or Bank Undertakings

- 3.7.1. On receiving AEMO's notification to provide Credit Support in step 2.7.1, a Market Participant must download a copy of the following documents from the Market Web Site:
- (a) Proforma guarantee or bank undertaking, as applicable; and
 - (b) Acceptable Credit Criteria form (this is required if the Treasury Corporation or bank is not on the list of entities meeting the Acceptable Credit Criteria, as published on the Market Web Site).
- 3.7.2. A Market Participant must then submit to AEMO a signed original hard copy of:
- (a) the proforma guarantee or bank undertaking, as applicable, which:
 - (i) is for an amount not less than the most recently determined Credit Limit for the Market Participant;
 - (ii) is in the form approved by AEMO and published on the Market Web Site; and
 - (iii) has been executed by a Treasury Corporation (in the case of a guarantee) or a bank (in the case of a bank undertaking), that meets the Acceptable Credit Criteria; and
 - (b) the Acceptable Credit Criteria form for the Credit Support provider (where applicable), completed in accordance with step 4.1.
- 3.7.3. AEMO must not accept a proforma guarantee or bank undertaking that does not meet the criteria in step 3.7.2(a).
- 3.7.4. At the same time as providing the guarantee or bank undertaking to AEMO, a Market Participant must also provide to AEMO any procedure that the Treasury Corporation or bank requires AEMO to follow when making a call on the Credit Support.
- 3.7.5. A Market Participant providing Credit Support in the form of a guarantee or a bank undertaking must ensure that processes are in place for the Treasury Corporation or the bank to release funds within 90 minutes of AEMO making a call on the Credit Support. Failure by the Treasury Corporation or bank to release funds within 90 minutes of AEMO making a call on the Credit Support constitutes a breach of clause 2.38.4(a) of the WEM Rules and triggers a Suspension Event in relation to that Market Participant under clause 9.23.1 of the WEM Rules.

- 3.7.6. The Market Participant must provide a hard copy of the guarantee or bank undertaking to AEMO either in person or by courier or registered mail.

3.8. Submitting Security Deposits

- 3.8.1. On receiving AEMO's notification to provide Credit Support in step 2.7.1, a Market Participant must download and submit a copy of the applicable document from the Market Web Site as follows:
- (a) Security Deposit deed for Credit Support; or
 - (b) Security Deposit deed for Credit Support (provided by third party); or
 - (c) Security Deposit direction for Credit Support.
- 3.8.2. When providing a Security Deposit for Credit Support, a Market Participant must provide AEMO with a completed Security Deposit deed for Credit Support or a Security Deposit deed for Credit Support (provided by third party) which:
- (a) is in the form approved by AEMO and published on the Market Web Site; and
 - (b) has been executed by, or on behalf of, the Market Participant.
- 3.8.3. AEMO must not accept a Security Deposit deed for Credit Support or a Security Deposit deed for Credit Support (provided by third party) that does not meet the criteria in step 3.8.2.
- 3.8.4. If a Market Participant has provided AEMO with a Security Deposit deed for Credit Support or a Security Deposit deed for Credit Support (provided by third party) that makes reference to a Security Deposit direction,⁴ the Market Participant may provide AEMO with a further amount under the existing Security Deposit by providing a Security Deposit direction for Credit Support.
- 3.8.5. A Security Deposit direction for Credit Support is a direction from the Market Participant to AEMO by email, which in substance is the same as the form published on the AEMO website, as amended from time to time by AEMO.
- 3.8.6. A Market Participant providing Credit Support in the form of a Security Deposit must provide the required Security Deposit deed or Security Deposit direction as soon as practicable. Failure by a Market Participant to provide both the completed Security Deposit deed or Security Deposit direction, as well as cleared funds, constitutes a breach of clause 2.38.1 of the WEM Rules and triggers a Suspension Event in relation to that Market Participant under clause 9.23.1 of the WEM Rules.
- 3.8.7. AEMO must sign the Security Deposit deed and provide the Market Participant with a copy of the signed Security Deposit deed-.

⁴ These are version 5.0 of the deed or later proforma Security Deposit deed for Credit Support or proforma Security Deposit deed for Credit Support (provided by third party).

3.9. AEMO's Process of Reviewing Credit Support Arrangements

- 3.9.1. On receiving completed documentation for Credit Support from a Market Participant, AEMO must review the Credit Support arrangement to:
- (a) determine whether it is compliant with clause 2.38.4(a) of the WEM Rules and the steps in section 3.7 of this Procedure, if the Credit Support arrangement is in the form of a guarantee or bank undertaking; or
 - (b) determine whether it is compliant with clause 2.38.4(b) of the WEM Rules and the steps in section 3.8 of this Procedure, if the Credit Support arrangement is in the form of a Security Deposit.
- 3.9.2. AEMO may, at its discretion, request more information from the Market Participant to support its Credit Support arrangement, by the Due Date determined by AEMO. The Market Participant must provide the relevant information by that Due Date.
- 3.9.3. Within five Business Days of the later of the dates on which AEMO receives completed documents under steps 3.9.1 and 3.9.2, AEMO must notify the Market Participant in writing that the Credit Support arrangement is either:
- (a) compliant with the WEM Rules and this Procedure; or
 - (b) not compliant with the WEM Rules and/or this Procedure and provide reasons as to why the Credit Support is not compliant.
- 3.9.4. If a Market Participant receives a notification of non-compliance under step 3.9.3(b), the Market Participant must re-submit a Credit Support arrangement that meets the requirements of clause 2.38.4 of the WEM Rules and step 3.6.

3.10. Further Steps by AEMO with respect to Credit Support Arrangements

- 3.10.1. Where the Credit Support arrangement is a guarantee or bank undertaking, then, at the same time as AEMO issues a notice of compliance to the Market Participant in step 3.9.3(a), AEMO must also notify the Treasury Corporation or the bank, as applicable, in writing, that the Credit Support arrangement has been provided in accordance with clause 2.38.4(a) of the WEM Rules and this Procedure.
- 3.10.2. After AEMO notifies the Market Participant and the Treasury Corporation or the bank, as applicable, in step 3.10.1, AEMO must place the completed guarantee or bank undertaking in a bank safe box, as soon as practicable.
- 3.10.3. Where the Credit Support arrangement is provided as a Security Deposit, then within 10 Business Days of cleared funds having been received by AEMO, AEMO must complete the process for registration of a security interest on the Personal Property Securities Register in accordance with

the *Personal Property Securities Act 2009* (Cth)⁵. As part of this process, AEMO must deduct any fees incurred in registering the security interest(s) from the balance of the Security Deposit and send a notice of the verification statement containing the details of the registration to the Credit Support provider and the Market Participant, as soon as practicable.

- 3.10.4. Upon completion of step 3.10.3, AEMO must place the completed Security Deposit deed in a bank safe box, as soon as practicable.

3.11. Replacing a Credit Support Arrangement

- 3.11.1. A Market Participant may replace the Credit Support arrangement provided (for example, replacing a Security Deposit with a bank undertaking) by notifying AEMO in writing prior to the replacement.
- 3.11.2. A Market Participant must include in its notification provided in step 3.11.1:
- (a) the form of replacement Credit Support arrangement to be provided;
 - (b) evidence that the replacement Credit Support arrangement will meet the requirements of clause 2.38.4 of the WEM Rules; and
 - (c) the date on which documents regarding the replacement Credit Support arrangement will be provided to AEMO, where the date must be at least 10 Business Days before the expiry date of the existing Credit Support held by AEMO.

3.12. Holding Security Deposits and Associated Costs

- 3.12.1. Where AEMO receives Credit Support in the form of a Security Deposit, it must:
- (a) invest any Security Deposit payments on behalf of the relevant Market Participant; and
 - (b) maintain individual accounts for Security Deposits separate from any AEMO operating funds accounts.
- 3.12.2. AEMO must credit the interest earned, which accrues daily at the Bank Bill Rate on the balance of the Security Deposit, to the relevant Market Participant's bank account on a monthly basis at the end of each calendar month and must deduct any liabilities and expenses, incurred by AEMO and associated with holding the Security Deposit, from the balance of the Security Deposit, including bank fees and charges [clause 2.38.5].
- 3.12.3. AEMO may provide written advice to a Market Participant on a monthly basis regarding the interest earned at the Bank Bill Rate and the deduction of any accrued costs and fees.

⁵ The *Personal Property Securities Act 2009* (Cth) (the Act) enables any person to register its security interests on the Personal Property Securities Register (Register). The Register is a real-time electronic notice board, which allows individuals and organisations to search and register security interests in personal property (see www.ppsr.gov.au for more information). For the purposes of the Act, any cash in a bank account (Security Deposit) under the control of AEMO pursuant to a Security Deposit deed, that is provided to AEMO for the purposes of Credit Support (Clause 2.38.4(b)) or Reserve Capacity Security (Clause 4.13), is a form of "personal property". AEMO's interest in the Security Deposit is a "security interest", and the Security Deposit deed secures payment and performance obligations of a Market Participant.

4. ACCEPTABLE CREDIT CRITERIA

4.1. Completing the Acceptable Credit Criteria Form

- 4.1.1. Where a Market Participant elects to provide a Credit Support, other than a Security Deposit, and the Credit Support provider is not included on the current list of entities meeting the Acceptable Credit Criteria, the Market Participant must arrange for the completion of an Acceptable Credit Criteria form, evidencing that the entity providing the Credit Support meets the Acceptable Credit Criteria outlined in clause 2.38.6 of the WEM Rules, by either:
- (a) the Market Participant's external solicitors; or
 - (b) the entity's external solicitors.
- 4.1.2. In completing the Acceptable Credit Criteria form under step 4.1.1, a Market Participant is responsible for arranging a firm of solicitors to undertake all necessary investigations to enable a partner of the firm to sign the Acceptable Credit Criteria form.
- 4.1.3. Before submitting an Acceptable Credit Criteria form, a Market Participant may submit a request to AEMO to confirm whether its particular firm of solicitors is acceptable to AEMO.
- 4.1.4. AEMO must respond in writing to a request, received under step 4.1.3, within one Business Day of receiving the request.
- 4.1.5. A completed Acceptable Credit Criteria form is one that adheres to requirements in clause 2.38.6 of the WEM Rules, in that the form:
- (a) has an affirmative response to each of the subclauses;
 - (b) has been completed with the full details of the entity to which it applies; and
 - (c) has been signed by a partner from a reputable commercial law firm that is acceptable to AEMO.
- 4.1.6. A Market Participant submitting a completed Acceptable Credit Criteria form must submit it together with its Credit Support arrangement.

4.2. Maintaining the List of Entities Meeting the Acceptable Credit Criteria

- 4.2.1. AEMO must publish and maintain on the Market Web Site, a list of entities meeting the Acceptable Credit Criteria **[clause 2.38.7]**.
- 4.2.2. To determine whether the entities mentioned on the list meet the Acceptable Credit Criteria, AEMO may assess any evidence provided by Market Participants in the previous 12 months, or may make its own determination, in its absolute discretion, at any time **[clauses 2.38.7]**.
- 4.2.3. Where AEMO assesses an Acceptable Credit Criteria form received from a Market Participant in the previous 12 months and deems the entity to meet the Acceptable Credit Criteria, then AEMO must include that entity in the list of entities meeting the Acceptable Credit Criteria prepared under clause 2.38.7 of the WEM Rules.
- 4.2.4. Every quarter AEMO will review whether the entities included on the list continue to have acceptable credit ratings, as specified in clause 2.38.6(f) of the WEM Rules. AEMO must monitor

the entities included on the list in accordance with clause 2.38.8, update the date the last monitoring occurred and make any required changes in the list as soon as practicable after it is satisfied that the list contains the most current information.

- 4.2.5. Where AEMO assesses that an entity no longer meets the Acceptable Credit Criteria, it may, at any time, remove the entity from the list of entities meeting the Acceptable Credit Criteria [clause 2.38.9].
- 4.2.6. Where AEMO removes an entity from the list of entities meeting the Acceptable Credit Criteria, it must notify affected Market Participants, in writing, within one Business Day of its removal. If a Market Participant's Credit Support is affected by the notification, it must provide valid replacement Credit Support in accordance with step 3.4.2(b).

5. PRUDENTIAL SECURITY

5.1. Outstanding Amount

5.1.1. When calculating the Outstanding Amount AEMO:

- (a) must use the actual amounts for which Settlement Statements have been issued by AEMO; and
- (b) may use an estimate where any input data is unavailable at the time of calculation, which is either:
 - (i) a value determined using the relevant estimation method in section 1.1.15.2 and detailed in the document published in step 5.1.2; or
 - (ii) if no relevant estimation methodology is specified, zero.

5.1.2. AEMO must document how it calculates a Market Participant's Outstanding Amount in accordance with the WEM Rules and this Procedure.

5.1.3. AEMO must publish the information in step 5.1.2 on the Market Web Site, and must update it from time to time in response to any changes to the WEM Rules and Market Procedures.

5.1.4. In accordance with clause 2.40.1 of the WEM Rules, AEMO must calculate the Outstanding Amount $OA(p)$ for a Market Participant p for all past complete Trading Days (relative to the time of calculation) as:

$$OA(p) = INP(p) + CEE(p) - PP(p)$$

where the variables are as defined in Table 3.

Table 3 Outstanding Amount Defined Terms

Variable	Units	Definition
$OA(p)$	\$ (inc GST)	The net amount Market Participant p owes AEMO at any point in time [clause 2.40.1].

Variable	Units	Definition
$INP(p)$	\$ (inc GST)	The invoices not paid by Market Participant p at the time of calculation, determined as the aggregate amount payable to AEMO for which no Settlement Statement has been issued [clause 2.40.1(a)] , less the aggregate amount payable by AEMO for which no Settlement Statement has been issued [clause 2.40.1(b)] .
$CEE(p)$	\$ (inc GST)	The cumulative estimated exposure at the time of calculation for Market Participant p as determined in step 5.1.5.1.4.
$PP(p)$	\$	The prepayment balance of Market Participant p at the time of calculation determined as the aggregate amount paid to AEMO for the purpose of reducing Outstanding Amount and increasing the Trading Margin [clause 2.40.1(c)] .

5.1.5. The cumulative estimated exposure for a Market Participant p , $CEE(p)$ is calculated as:

$$CEE(p) = \sum_{d \in EXPDAYS} EE(p, d)$$

where the variables are defined in Table 4.

Table 4 Cumulative Estimated Exposure Defined Terms

Variable	Units	Definition
$CEE(p)$	\$ (inc GST)	The cumulative estimated exposure at the time of calculation for Market Participant p determined as the aggregate amount payable to AEMO for which no Settlement Statement has been issued [clause 2.40.1(a)] , less the aggregate amount payable by AEMO for which no Settlement Statement has been issued [clause 2.40.1(b)] .
$EXPDAY$	{ }	The set of complete past Trading Days for which AEMO has not published the initial Non-STEM Settlement Statement at the time of calculation.
$EE(p, d)$	\$ (inc GST)	The estimated exposure for Market Participant p attributed to Trading Day d calculated in accordance with the principles in step 5.1.6.5.1.5.

5.1.6. The formulation of $EE(p, d)$ must be consistent with the following principles:

- (a) It must be split into a STEM component and a Non-STEM component.
- (b) The STEM component must be consistent with the STEM settlement amount calculation in section 9.6 of the WEM Rules.
- (c) The Non-STEM component must be consistent with the following calculations in the WEM Rules:
 - (i) the Reserve Capacity Settlement amount in section 9.7 of the WEM Rules;
 - (ii) the Balancing Settlement amount in section 9.8 of the WEM Rules;
 - (iii) the Ancillary Service Settlement amount in section 9.9 of the WEM Rules;
 - (iv) the Outage Compensation Settlement amount in section 9.10 of the WEM Rules;
 - (v) the Reconciliation Settlement amount in section 9.11 of the WEM Rules;
 - (vi) the Market Participant Fee Settlement amount in section 9.13 of the WEM Rules; and
 - (vii) the Service Fee Settlement Amount in section 9.15 of the WEM Rules.

5.1.7. AEMO may forecast a Market Participant's estimated exposure for a partially complete Trading Day, however this is in an indication only and is not used in the calculation of Outstanding Amount.

5.1. Outstanding Amount

5.1.1. In accordance with clause 2.40.1 of the WEM Rules, AEMO must calculate the Outstanding Amount (OA) for a Market Participant, p , as

$$OA = INP + EE - PP$$

where the variables are defined as per the table below:

Variable	Units	Definition
INP	\$ (inc GST)	Invoices not paid as described in WEM Rules clause 2.40.1(a).
EE	\$ (inc GST)	Estimated exposure as described in WEM Rules clause 2.40.1(b) and calculated as per step 5.1.2 below.
PP	\$ (inc GST)	Prepayments as described in WEM Rules clause 2.40.1(c) and 5.2 below.

5.1.2. EE is calculated as:

$$\begin{aligned}
 EE = & \frac{Days_{STEMexposed}}{Days_{STEMinv}} \times STEM_{inv} \\
 & + \frac{Days_{NSTEMexposed}}{Days_{NSTEMinv}} \times [NSTEM_{inv} + (CCA_{rec,NSTEMinv} - CCA_{made,NSTEMinv}) \times 1.1 \times MRCP_{NSTEMinv}] \\
 & - \sum_{d \in D} [(CCA_{rec,d} - CCA_{made,d}) \times 1.1 \times RCP_d]
 \end{aligned}$$

where the variables are defined as per the table below:

Variable	Units	Definition
$Days_{STEMexposed}$	days	The number of complete Trading Days in the past for which no STEM invoice has been issued.
$Days_{STEMinv}$	days	The number of Trading Days in the most recent Trading Week for which a STEM invoice was published.
$STEM_{inv}$	\$ (inc GST)	The amount payable by Market Participant p for the most recent Trading Week for which a STEM invoice was published.
$Days_{NSTEMexposed}$	days	The number of complete Trading Days in the past for which no NSTEM invoice has been published.

Variable	Units	Definition
$Days_{NSTEM}$	days	The number of Trading Days in the most recent Trading Month for which an NSTEM Initial invoice was published.
$NSTEM_{Inv}$	\$ (inc GST)	The amount payable by Market Participant p for the most recent Trading Month for which an NSTEM Initial invoice was published.
$CCA_{TCENSTEM}$	Capacity Credits	The number of Capacity Credits allocated to the Market in the most recent Trading Month for which an NSTEM Initial invoice was published.
$CCA_{madeNSTEM}$	Capacity Credits	The number of Capacity Credits that were allocated to other Market Participants in the most recent Trading Month for which an NSTEM Initial invoice was published.
$MRCP_{NSTEM}$	\$ per Capacity Credit (ex GST)	The Monthly Reserve Capacity Price, which was applied in the most recently published NSTEM Initial invoice.
D	N/A	The set of all complete Trading Days in the past for which no NSTEM invoice has been issued.
CCA_{year}	Capacity Credits	The number of Capacity Credits allocated to Market Participant p in the Trading Month in which Trading Day d falls.
$CCA_{made,d}$	Capacity Credits	The number of Capacity Credits allocated by Market Participant p to other Market Participants in the Trading Month in which Trading Day d falls.
RCP_d	\$ per Capacity Credit (ex GST)	The daily Reserve Capacity Price calculated as the Monthly Reserve Capacity Price, which applies to the Trading Month in which Trading Day d falls, divided by the number of days in the Trading Month in which Trading Day d falls.

5.1.3. AEMO may also determine a Market Participant's forecast exposure (not included in the Outstanding Amount) to represent the forecast exposure that may be reached until the next Invoicing Date for Non-STEM Settlement. This is calculated as a projection of the Market Participant's Outstanding Amount between the date when the Outstanding Amount is calculated and the next Invoicing Date for Non-STEM Settlement.

5.2. Estimation Methodology for the Purposes of Determining the Outstanding Amount

- 5.2.1. Where the metered energy generated or consumed by a Facility f ⁶ in Trading Interval i is unavailable, it may be estimated:
- (a) where SCADA data and output estimates for Facility f in Trading Interval i under clause 7.13.1(cA) of the WEM Rules is available, as this value; or
 - (b) where SCADA data and output estimates for Facility f in Trading Interval i under clause 7.13.1(cA) of the WEM Rules is unavailable, by linearly scaling generated or consumed energy for Facility f from a similar Trading Interval (as determined by AEMO), by the Relevant Dispatch Quantity.
- 5.2.2. Where the SCADA data or output estimate produced under clause 7.13.1(cA) of the WEM Rules for Facility f in Trading Interval i is unavailable, it may be estimated by assuming Facility f maintained its EOI Quantity over the duration of that Trading Interval i .
- 5.2.3. Where the Ex-post Downwards LFAS Enablement quantity for Facility f in Trading Interval i is unavailable, it may be estimated:
- (a) where the Downwards LFAS Enablement quantity for Facility f in Trading Interval i is available, as this value; or
 - (b) where the Downwards LFAS Enablement quantity for Facility f in Trading Interval i is unavailable, as the forecast value based on the Forecast Downwards LFAS Merit Order and Forecast Downwards LFAS Quantity for Trading Interval i .
- 5.2.4. Where the Ex-post Upwards LFAS Enablement quantity for Facility f in Trading Interval i is unavailable, it may be estimated:
- (a) where the Upwards LFAS Enablement quantity for Facility f in Trading Interval i is available, as this value; or
 - (b) where the Upwards LFAS Enablement quantity for Facility f in Trading Interval i is unavailable, as the forecast value based on the Forecast Upwards LFAS Merit Order and Forecast Upwards LFAS Quantity for Trading Interval i .
- 5.2.5. Where the applicable monthly dollar value for an Ancillary Service Contract (for Load Rejection Reserve Service, System Restart Service or Dispatch Support Service) for Trading Month m is not yet finalised for settlement purposes, it may be estimated as the monthly dollar value for the same Ancillary Service Contract in the most recently available Trading Month.
- 5.2.6. Where the quantity of Spinning Reserve Service provided under an Ancillary Service Contract for Trading Interval i is unavailable, it may be estimated as the quantity of Spinning Reserve Service provided under the same Ancillary Service Contract in a similar Trading Interval to Trading Interval i (as determined by AEMO).
- 5.2.7. Where the applicable monthly dollar value for an Ancillary Service Contract (for Spinning Reserve Service) for Trading Month m is not yet finalised for settlement purposes, it may be estimated by applying the methodology used to compensate Synergy for Spinning Reserve Service under section 9.9 of the WEM Rules.
- 5.2.8. Where the Relevant Dispatch Quantity for Trading Interval i is unavailable, it may be estimated as

⁶ A Facility includes "a connection point at which electricity is delivered for am distribution system or transmission system to a Rule Participant ("Load")" [clause 2.29.1(d)].

the Load Forecast for that Trading Interval i .

- 5.2.9. Where the EOI Quantity for Facility f in Trading Interval i is unavailable, it may be estimated by converting the metered energy generated or consumed for Facility f in Trading Interval i into an average power output over the duration of that Trading Interval i .
- 5.2.10. Where a Distribution Loss Factor for Facility f in Trading Interval i is unavailable, it may be estimated as 1.
- 5.2.11. Where a Transmission Loss Factor for Facility f in Trading Interval i is unavailable, it may be estimated as 1.
- 5.2.12. Where an Outage quantity for Facility f in Trading Interval i is unavailable it may be estimated as a quantity considered reasonable by System Management based on information available to it at the time of calculation, including, but not limited to, those in the schedule of Outages prepared under clause 7.3.4 of the WEM Rules.
- 5.2.13. Where the daily maximum temperature associated with Facility f for Trading Day d is unavailable, it may be estimated as 25 degrees Celsius.
- 5.2.14. Where the Balancing Price for Trading Interval i is unavailable, it may be estimated as the Provisional Balancing Price for Trading Interval i .
- 5.2.15. Where the Provisional Balancing Price for Trading Interval i is unavailable, it may be estimated using the Forecast BMO and Relevant Dispatch Quantity for Trading Interval i .
- 5.2.16. Where the Individual Reserve Capacity Requirement for Market Participant p in Trading Month m is unavailable, it may be estimated as the Indicative Individual Capacity Requirement for Market Participant p in Trading Month m .
- 5.2.17. Where the Maximum Theoretical Energy Schedule for Facility f in Trading Interval i is unavailable, it may be estimated (at AEMO's discretion) by either:
- (a) using the methodology in clause 6.15.1 of the WEM Rules; or
 - (b) assuming a sufficiently large value such that the Constrained On Quantity, as calculated under clause 6.17.3 and 6.17.3A of the WEM Rules, is zero.
- 5.2.18. Where the Minimum Theoretical Energy Schedule for Facility f in Trading Interval i is unavailable, it may be estimated (at AEMO's discretion) by either:
- (a) using the methodology in clause 6.15.2 of the WEM Rules; or
 - (b) assuming a sufficiently small value such that no Constrained Off Quantity, as calculated under clause 6.17.4 and 6.17.4A of the WEM Rules, is zero.

5.2.5.3. Voluntary Prepayment

~~5.2.1~~5.3.1. A Market Participant may make a voluntary prepayment to AEMO at any time.

~~5.2.2~~5.3.2. A voluntary prepayment, is for the purposes of:

- (a) reducing the Market Participant's Outstanding Amount, and, thereby, increasing its Trading Margin, on each day, from the first Trading Day on which the Outstanding Amount is calculated, after AEMO receives the Prepayment Amount, until the Trading Day on which the Prepayment Amount is fully applied towards amounts payable by the Market Participant to AEMO; and
- (b) being applied to amounts payable by the Market Participant to AEMO, as specified in the Invoice, for the next STEM Settlement Statement or Non-STEM Settlement Statement (as applicable).

~~5.2.3~~~~5.3.3~~ 5.3.3 A Market Participant must provide a completed prepayment direction and cleared funds to AEMO [clause 2.40.1(c)].

~~5.2.4~~~~5.3.4~~ 5.3.4 AEMO must apply any prepayment amount towards amounts payable by the Market Participant to AEMO, as specified in the Invoice for the next STEM Settlement Statement or Non-STEM Settlement Statement (as applicable); and, to the extent there is a residual amount, as specified in subsequent Invoices for STEM Settlement Statements or Non-STEM Settlement Statements.

~~5.2.5~~~~5.3.5~~ 5.3.5 AEMO may, in its absolute discretion, apply a fee to cover the administrative costs in facilitating voluntary prepayments.

5.3.5.4 Trading Margin

~~5.3.1~~~~5.4.1~~ 5.4.1 AEMO must calculate the Trading Margin for a Market Participant as the amount by which its Trading Limit exceeds its Outstanding Amount at that time [clause 2.41.1].

~~5.3.2~~~~5.4.2~~ 5.4.2 Notwithstanding any other factors and analyses, a Market Participant electing to make a submission in the market should take into account the factors set out in Appendix A of this Procedure, in accordance with clause 2.41.5 of the WEM Rules, to determine whether that transaction could result in the Market Participant's Trading Margin being exceeded.

~~5.3.3~~~~5.4.3~~ 5.4.3 If a Market Participant determines that the assessment conducted in step 5.3.2 could result in its Trading Margin being exceeded, the Market Participant must not make such a submission in the market [clause 2.41.2].

~~5.3.4~~~~5.4.4~~ 5.4.4 AEMO may reject a submission from a Market Participant if AEMO's assessment, taking into account the factors listed in Appendix A of this Procedure, indicates that the transaction could result in the Market Participant's Trading Margin being exceeded [clause 2.41.3].

5.4.5.5 Margin Call

~~5.4.1~~~~5.5.1~~ 5.5.1 On any day that a Market Participant's Trading Margin is less than zero, AEMO may decide to make a Margin Call by issuing a Margin Call Notice in writing [clause 2.42.1].

~~5.4.2~~~~5.5.2~~ 5.5.2 AEMO must specify the following in the Margin Call Notice:

- (a) The Margin Call amount in accordance with clause 2.42.1 of the WEM Rules. The Margin Call amount is determined as the amount that will increase the Market Participant's Trading Margin to zero, at the time the Margin Call Notice is issued [clause 2.42.3];

- (b) The date of the Margin Call Notice determined as follows:
 - (i) Where the Margin Call Notice is issued before noon, then the notice is deemed to have been issued the same day; and
 - (ii) Where the Margin Call Notice is issued after noon, then the notice is deemed to have been issued on the next Business Day; and
- (c) In accordance with clause 2.42.4 of the WEM Rules, the deadline to be outlined in this Procedure, by which the Market Participant must respond to the Margin Call Notice and provide the Margin Call amount, is before noon on the next Business Day following the deemed date of notice.

~~5.4.3.~~5.5.3. A Market Participant must respond to the Margin Call by:

- (a) providing a Security Deposit in cleared funds to AEMO, equivalent to the amount of the Margin Call. The Security Deposit must be made in accordance with step 3.8 of this Procedure and clause 2.38.4(b) of the WEM Rules; or
- (b) providing additional Credit Support in the form of a guarantee or bank undertaking equivalent to the amount of the Margin Call. The guarantee or bank undertaking must be made in accordance with step 3.7 and clause 2.38.4(a) of the WEM Rules **[clause 2.42.4]**.

~~5.4.4.~~5.5.4. If a Market Participant fails to comply with clause 2.42.4 of the WEM Rules, then a Suspension Event is triggered in relation to Market Participant under clause 9.23.1 of the WEM Rules **[clause 2.42.6]**.

~~5.4.5.~~5.5.5. AEMO may cancel a Margin Call Notice at any time, by notifying the Market Participant in writing. AEMO reserves the right to issue a further Margin Call Notice on the same grounds that gave rise to the cancelled Margin Call Notice **[clause 2.42.5]**.

~~5.4.6.~~5.5.6. Where AEMO issues a Margin Call Notice, it must review the Credit Limit of the Market Participant within 30 Business Days after the date on which the Margin Call Notice was issued **[clause 2.42.7]**. AEMO must review the Credit Limit in accordance with steps 2.2 or 2.3, as applicable.

~~5.5.~~5.6. Prudential Risk Report

~~5.5.1.~~5.6.1. AEMO must ensure that the prudential risk report for a Market Participant is updated daily on the 'Market Participant Interface' in WEMS⁷. The prudential risk report must have updated values for the Market Participant's:

- (a) Unpaid Invoices, after offsetting cleared voluntary prepayments;
- (b) Outstanding Amount; and
- (c) Trading Margin.

~~5.5.2.~~5.6.2. Where applicable, AEMO may provide updated values for a Market Participant's Margin Call amount (calculated in step 5.4.2(a)) and estimated exposure (calculated in step ~~1.1.15.~~1.2).

⁷ Access to the Market Participant Interface in WEMS is only available, upon login, to authorised users nominated by that Market Participant.

APPENDIX A. FACTORS TO BE TAKEN INTO ACCOUNT IN DETERMINING THE EXPECTED VALUE OF A TRANSACTION ~~[IN ACCORDANCE WITH CLAUSE 2.41.5 OF THE WEM RULES]~~

These factors are intended to provide guidance to enable a Market Participant or AEMO to determine the expected value of a transaction that would, were the transaction to be assessed taking into account the expected value factors:

- (a) enable a Market Participant to ascertain that a contemplated transaction could result in the Market Participant's Trading Margin being exceeded and, therefore, that the submission must not be made under clause 2.41.2 of the WEM Rules; or
- (b) enable AEMO to ascertain that a contemplated transaction could result in the Market Participant's Trading Margin being exceeded and therefore that the submission may be rejected under clause 2.41.3 of the WEM Rules.

Where a Market Participant or AEMO is assessing whether a transaction contemplated by a submission could result in a Market Participant's Trading Margin being exceeded, Market Participants and AEMO must:

- (a) Take into account all information that is readily available, making reasonable assumptions and estimates, where necessary, based on the Market Participant's normal commercial position and trading activities and any unusual circumstances that may exist at the time; and
- (b) Arrive at a value, using reasonable estimates of the Market Participant's current and forecast STEM and Non-STEM Settlement exposure, taking into account relevant prevailing, recent and/or anticipated (including but not limited to):
 - (i) Outstanding Amounts, as calculated in clause 2.40.1 of the WEM Rules and the steps in section 5.1 and 5.2 of this Procedure;
 - (ii) transactions in relation to STEM and Non-STEM Settlement;
 - (iii) STEM, Balancing and Reserve Capacity Prices;
 - (iv) Ancillary Service Settlement amount;
 - (v) Reconciliation Settlement amount;
 - (vi) Forced Outages and the applicable refund factor determined in clause 4.26.1 of the WEM Rules; and
 - (vii) ~~Material~~ material changes in market conditions.

In terms of assessing whether a proposed transaction contemplated by a submission could result in a Market Participant's Trading Margin being exceeded, AEMO would consider it reasonable if, for example:

- (a) A Market Participant used actual Outstanding Amounts and unpaid Invoices when considering the contemplated submission to assess current and expected liabilities arising from transactions in relation to STEM and Non-STEM Settlement;
- (b) A Market Participant used recent actual or average daily, weekly or monthly prices over the preceding three-month period, when considering the contemplated submission, to assess current and expected liabilities arising from the STEM, Balancing Market and Reserve Capacity Prices;
- (c) A Market Participant used recent actual or average Ancillary Service and Reconciliation Settlement amounts over the preceding three-month period, when considering the

contemplated submission, to assess current and expected Ancillary Service and Reconciliation Settlement amounts;

- (d) A Market Participant used prevailing refund factor and actual time on Forced Outage when considering the contemplated submission to assess current and expected Capacity Cost Refunds; or
- (e) A Market Participant took reasonable account of changes in market conditions, including, but not limited to, fuel availability, system demand, market prices, or any circumstance that was having, or could reasonably be expected to have, a material effect on market conditions.