3. **Market Rules**

3.1 **Introduction to Market Rules**

3.1.1 **Purpose**

This Chapter sets out the procedures which govern the operation of the market relating to the wholesale trading of electricity and the provision of ancillary services and includes provisions relating to:

(a) **prudential requirements** to be met for participation in the market;
(b) the operation of the spot market;
(c) bidding and dispatch;
(d) **spot price** determination;
(d1) the determination of ancillary service prices;
(e) **AEMO** clearing house and trading functions;
(f) market information requirements and obligations;
(g) the conditions and procedures for market suspension; and
(h) settlements.

3.1.1A **Definitions**

In this Chapter:

credit limit procedures means the procedures developed, published and maintained by AEMO under clause 3.3.8.

credit period means the sum of the payment period and the reaction period as determined by AEMO.

maximum credit limit means the minimum amount of credit support a Market Participant must provide to AEMO for the relevant credit period, as determined by AEMO in accordance with clause 3.3.8.

outstandings limit means AEMO's estimate of the maximum value that a Market Participant's outstandings can reach over the payment period if the Market Participant has lodged credit support equal to the maximum credit limit.

payment period means the number of days in a billing period plus the number of days until payment is due with respect to transactions for that billing period.

prudential margin means the allowance made by AEMO in determining a Market Participant's maximum credit limit for the accrual of the Market Participant's outstandings during the reaction period.

prudential probability of exceedance means the probability of the Market Participant's maximum credit limit being exceeded by its outstandings at the end of the reaction period following the Market Participant exceeding its outstandings limit on any day, and failing to rectify this breach.
**prudential settings** means the maximum credit limit, outstandings limit and prudential margin as determined by *AEMO* in accordance with clause 3.3.8.

**prudential standard** means the value of the prudential probability of exceedance, expressed as a percentage, and as specified under clause 3.3.4A, to be used by *AEMO* to determine the prudential settings to apply to *Market Participants*.

**reaction period** means a period of 7 days. It represents, for the purpose of calculating the prudential settings, the time from the day that a *Market Participant’s outstandings* exceeds its *trading limit* to when the *Market Participant* is suspended from trading under clause 3.15.21(c) if the exceedance is not rectified.

### 3.1.4 Market design principles

(a) This Chapter is intended to give effect to the following market design principles:

1. minimisation of *AEMO* decision-making to allow *Market Participants* the greatest amount of commercial freedom to decide how they will operate in the *market*;

2. maximum level of *market* transparency in the interests of achieving a very high degree of *market* efficiency, including by providing accurate, reliable and timely forecast information to *Market Participants*, in order to allow for responses that reflect underlying conditions of supply and demand;

3. avoidance of any special treatment in respect of different technologies used by *Market Participants*;

4. consistency between *central dispatch* and pricing;

5. equal access to the market for existing and prospective *Market Participants*;

6. *market ancillary services* should, to the extent that it is efficient, be acquired through competitive market arrangements and as far as practicable determined on a dynamic basis. Where dynamic determination is not practicable, competitive commercial contracts between *AEMO* and service providers should be used in preference to bilaterally negotiated arrangements;

7. the relevant action under section 116 of the *National Electricity Law* or direction under clause 4.8.9 must not be affected by competitive market arrangements;

8. where arrangements require participants to pay a proportion of *AEMO* costs for *ancillary services*, charges should where possible be allocated to provide incentives to lower overall costs of the *NEM*. Costs unable to be reasonably allocated this way should be apportioned as broadly
as possible whilst minimising distortions to production, consumption and investment decisions; and

(9) where arrangements provide for AEMO to acquire an ancillary service, AEMO should be responsible for settlement of the service.

(a1) [Deleted]

(a2) [Deleted]

(b) This Chapter is not intended to regulate anti-competitive behaviour by Market Participants which, as in all other markets, is subject to the relevant provisions of the Competition and Consumer Act 2010 (Cth) and the Competition Codes of participating jurisdictions.

3.1.5 Time for undertaking action
The provisions of clause 1.7.1(l) do not apply to this Chapter and, under the provisions of this Chapter, an event which is required to occur on or by a stipulated day must occur on or by that day whether or not a business day.

3.2 AEMO's Market Responsibilities

3.2.1 Market functions of AEMO
(a) AEMO must operate and administer the market in accordance with this Chapter.

(b) AEMO must establish, maintain and publish a register of all current Market Participants.

(c) AEMO must:

   (1) establish procedures for consultation with Registered Participants in respect of the manner in which AEMO fulfils its functions and obligations under the Rules; and

   (2) publish annually performance indicators to monitor AEMO's performance in respect of its market management functions.

3.2.2 Spot market
AEMO must do all things necessary to operate and administer a spot market for the sale and purchase of electricity and market ancillary services in accordance with this Chapter including:

(a) the provision of facilities for the receipt and processing of dispatch bids, dispatch offers and market ancillary service offers for the spot market;

(b) the management of a centralised national dispatch process, including the publication of pre-dispatch schedules and spot price forecasts;

(c) the determination and publication of spot prices at each regional reference node for each trading interval;

(c1) the determination and publication of ancillary service prices at each regional reference node for each dispatch interval;
(d) the compilation and publication of spot market trading statistics;
(e) the identification of regions and regional reference nodes for spot price and ancillary service price determination;
(f) the determination and publication of inter-regional loss factors and intra-regional loss factors;
(g) the suspension of the spot market under conditions prescribed in rule 3.14; and
(h) the collection and dissemination of information necessary to enable the market to operate efficiently.

3.2.3 Power system operations

(a) Subject to Chapter 4, AEMO must manage the day to day operation of the power system, using its reasonable endeavours to maintain power system security in accordance with this Chapter.

(b) AEMO must perform projected assessment of system adequacy processes (PASA) in accordance with rule 3.7, publish the details of these assessments in accordance with rule 3.13 and implement an escalating series of market interventions in accordance with this Chapter to maintain power system security.

3.2.4 Non-market ancillary services function

(a) AEMO must determine the market's requirements for non-market ancillary services in accordance with rule 3.11.

(b) AEMO must use reasonable endeavours to acquire non-market ancillary services in accordance with rule 3.11.

3.2.5 [Deleted]

3.2.6 Settlements

AEMO must provide a financial settlements service in accordance with rule 3.15, including billing and clearance for all market trading.

3.3 Prudential Requirements

3.3.1 Market Participant criteria

Each Market Participant must whilst participating in the market:

(a) be resident in, or have a permanent establishment in, Australia;

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(b) [Deleted].

(c) not be immune from suit in respect of the obligations of the Market Participant under the Rules; and
(d) be capable of being sued in its own name in a court of Australia.

### 3.3.2 Credit support

Where at any time a *Market Participant* does not meet the **acceptable credit criteria**, the *Market Participant* must procure that *AEMO* holds the benefit of **credit support** in respect of that *Market Participant*. A **credit support** is an obligation in writing which:

(a) is from an entity (the *Credit Support Provider*) which meets the **acceptable credit criteria** and which is not itself a *Market Participant*;

**Note**

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(b) is a guarantee or bank letter of credit in a form prescribed by *AEMO*;

**Note**

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(c) is duly executed by the *Credit Support Provider* and delivered unconditionally to *AEMO*;

**Note**

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(d) constitutes valid and binding unsubordinated obligations of the *Credit Support Provider* to pay to *AEMO* amounts in accordance with its terms which relate to obligations of the relevant *Market Participant* under the **Rules**; and

**Note**

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(e) permits drawings or claims by *AEMO* to a stated certain amount.

**Note**

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

### 3.3.3 Acceptable credit criteria

Where the **Rules** require that an entity meet the **acceptable credit criteria**, this means that the entity must:

(a) be either:

1. any entity under the prudential supervision of the Australian Prudential Regulation Authority; or
(2) a central borrowing authority of an Australian State or Territory which has been established by an Act of Parliament of that State or Territory;

(b) be resident in, or have a permanent establishment in, Australia;

(c) not be an externally administered body corporate (as defined in the Corporations Act) or under a similar form of administration under any laws applicable to it in any jurisdiction;

(d) not be immune from suit;

(e) be capable of being sued in its own name in a court of Australia; and

(f) have an acceptable credit rating.

3.3.4 Acceptable credit rating

(a) AEMO may from time to time, after complying with the Rules consultation procedures, determine what constitutes an acceptable credit rating for the purposes of the Rules, including (without limitation) determining which organisations publishing ratings will be used for this purpose, which of the type of ratings issued will be used for this purpose, and which level of rating is to be acceptable.

(b) Until varied by determination of AEMO, an acceptable credit rating is either:

(1) a rating of A-1 or higher for short term unsecured counterparty obligations of the entity, as rated by Standard and Poor's (Australia) Pty. Limited; or

(2) a rating of P-1 or higher for short term unsecured counterparty obligations of the entity, as rated by Moody's Investor Service Pty. Limited.

(c) Any determination of AEMO which varies what constitutes an acceptable credit rating will take effect from such date (not being earlier than 30 business days after the date of notification of the determination to Market Participants) as AEMO specifies by notice to the Market Participants.

3.3.4A Prudential standard

The prudential standard is 2%.

3.3.5 Amount of credit support

A Market Participant which does not meet the acceptable credit criteria must procure that at all times the aggregate undrawn or unclaimed amounts of then current and valid credit support held by AEMO in respect of the Market Participant is not less than the current maximum credit limit for that Market Participant.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)
3.3.6 Changes to credit support

(a) If:

(1) a credit support provided to AEMO by a Market Participant under this rule 3.3 (called the existing credit support), is due to expire or terminate; and

(2) after that credit support expires or terminates the total credit support held by AEMO in respect of that Market Participant will be less than the Market Participant's maximum credit limit,

then at least 10 business days prior to the time at which the existing credit support is due to expire or terminate the Market Participant must procure a replacement credit support which will become effective upon expiry of the existing credit support such that it complies with the requirements of this rule 3.3.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(b) Where a credit support otherwise ceases to be current or valid, whether by reason of the Credit Support Provider ceasing to meet the acceptable credit criteria or any other reason, the Market Participant must procure the replacement of that credit support so as to comply with its obligation to maintain aggregate undrawn current and valid credit support of not less than the current maximum credit limit for that Market Participant. The Market Participant must procure that the replacement credit support is issued to AEMO within 24 hours after the Market Participant first becomes aware that the credit support has ceased to be current or valid (whether by reason of the Market Participant's own knowledge or a notification by AEMO).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

3.3.7 Drawings on credit support

(a) If AEMO exercises its rights under a credit support provided by a Market Participant under this rule 3.3 in accordance with clause 3.15.21(b)(2), then AEMO must notify the Market Participant.

(b) If, as a result of AEMO exercising its rights under a credit support provided by a Market Participant under this rule 3.3 in accordance with clause 3.15.21(b)(2), the remaining credit support held by AEMO in respect of that Market Participant is less than the Market Participant's maximum credit limit then, within 24 hours of receiving a notice under clause 3.3.7(a), the Market Participant must procure for AEMO additional credit support complying with the requirements of this rule 3.3, such that the aggregate undrawn and valid credit support held by AEMO in respect of the Market Participant is not less
than the amount of credit support which that Market Participant is required to provide under this rule 3.3.

**Note**
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

### 3.3.8 Credit limit procedures and prudential settings

**Credit limit procedures**

(a) This clause sets out the framework for the establishment and determination of the prudential settings for Market Participants in the NEM.

(b) The objective of the credit limit procedures is to establish the process by which AEMO will determine the prudential settings for each Market Participant so that the prudential standard is met for the NEM.

(c) AEMO must develop, and, at all times, publish and maintain the credit limit procedures that details the methodology to be used by it to determine the prudential settings to apply to Market Participants.

(d) In developing the methodology to be used by AEMO to determine the prudential settings to apply to Market Participants, AEMO must take into consideration the following factors:

1. the regional reference price for the region for which the prudential settings are being calculated;
2. the time of year;
3. the volatility of load and regional reference price for the regions;
4. AEMO's estimate of the generation and load for each Market Participant;
5. the relationship between average load and peak load for each Market Participant;
6. any prospective reallocations for the period being assessed;
7. the correlation between energy, reallocations and the regional reference price;
8. the statistical distribution of any accrued amounts that may be owed to AEMO;
9. the relevant time period for which the prudential settings are being calculated; and
10. any other factors AEMO considers relevant having regard to the objective of the credit limit procedures under paragraph (b).

(e) [Deleted]

(f) At least once a year, AEMO must review, prepare and publish a report on the effectiveness of the methodology developed under this clause in achieving
the objective of the credit limit procedures under paragraph (b), with any recommendations for the enhancement of the methodology.

(g) Subject to paragraph (h), AEMO must comply with the Rules consultation procedures when making or amending the credit limit procedures.

(h) AEMO may make minor or administrative amendments to the credit limit procedures without complying with the Rules consultation procedures.

**Prudential settings**

(i) AEMO must determine the prudential settings to apply to Market Participants in accordance with:

1. the objective of the credit limit procedures under paragraph (b); and
2. the credit limit procedures.

(j) The outstandings limit and prudential margin are interdependent, and AEMO must determine these simultaneously to meet the prudential standard for the NEM.

(k) The maximum credit limit for a Market Participant is the dollar amount determined by AEMO using the following formula:

\[ MCL = OSL + PM \]

where:

MCL is the maximum credit limit;

OSL is the outstandings limit; and

PM is the prudential margin.

(k1) The prudential margin for a Market Participant must not be a negative amount.

(l) AEMO must review the prudential settings that apply to each Market Participant no later than a year after the last determination or review of the Market Participant's prudential settings.

(m) At any time, and for any reason that is consistent with objective of the credit limit procedures under paragraph (b), AEMO may change the prudential settings that apply to a Market Participant, provided that any change to the Market Participant's prudential settings applies no earlier than one business day after the date AEMO notifies the Market Participant of changes to its prudential settings.

(n) AEMO must notify, in writing, the Market Participant of any determination or change of a Market Participant's prudential settings, and provide reasons for that determination or change.
3.3.8A Security Deposits
At any time, a Market Participant may provide a security deposit to AEMO to secure payment of any amount which may become payable in respect of a billing period.

3.3.9 Outstandings
At any time the outstandings of a Market Participant is the dollar amount determined by the formula:

\[ OS = - (A + B + SDA) \]

where:

OS is the amount of the outstandings of the Market Participant;
A is the aggregate of the net settlement amounts payable in respect of billing periods prior to the current billing period which remain unpaid by, or to, the Market Participant whether or not the payment date has yet been reached;
B is the net settlement amount payable by, or to, the Market Participant in respect of transactions for trading intervals that have already occurred in the current billing period; and
SDA is the balance (if any) of the Market Participant in the security deposit fund, in which case a credit balance will be a positive amount and a debit balance will be a negative amount.

The amounts to be used in this calculation will be the actual settlement amounts for billing periods where final statements have been issued by AEMO or AEMO’s reasonable estimate of the settlement amounts for billing periods (where final statements have not been issued by AEMO).

Note:
Where the value of outstandings of a Market Participant is a negative amount the absolute value of the outstandings amount will, for the purposes of rule 3.3, be treated as if it were an amount payable by AEMO to the Market Participant.

3.3.10 Trading limit
The trading limit for a Market Participant is the dollar amount determined by AEMO using the following formula

\[ TL = CS - PM \]

where:

TL is the trading limit;
CS is the credit support provided by the Market Participant; and
PM is the prudential margin determined by AEMO in accordance with clause 3.3.8

Note:
If the prudential margin exceeds the credit support, the trading limit will have a negative value.
3.3.11 Call notices

(a) If at any time the outstandings of a Market Participant is greater than the trading limit for that Market Participant, AEMO may do either or both of the following:

(1) give the Market Participant an "interim statement" covering any transactions for trading intervals not already the subject of issued preliminary statements or final statements or another interim statement, notwithstanding that the usual time for the issue of a preliminary statement or final statement for those trading intervals has not been reached; and

(2) give the Market Participant a notice (a call notice) that specifies an invoiced amount, the current maximum credit limit for the Market Participant, the current trading limit for the Market Participant, and the call amount, where:

Call Amount = the higher of:

(OS – TypA); and

(OS – TL)

except where the formula produces a negative result, in which case the call amount is zero,

where:

OS is the outstandings for the Market Participant as at the date of the issue of the call notice; and

TypA is the typical accrual for the Market Participant as at the date of the issue of the call notice; and

TL is the trading limit for the Market Participant as at the date of the issue of the call notice.

Note:

If the value of outstandings of a Market Participant has a negative value and the trading limit also has a negative value, the outstandings will be greater than the trading limit if the absolute value of the trading limit is greater than the absolute value of the outstandings, in which case AEMO may exercise its powers under either or both of clauses 3.3.11(a)(1) or 3.3.11(a)(2).

(b) AEMO may, in its absolute discretion, cancel a call notice or interim statement issued under this clause at any time. The cancellation of a call notice or interim statement does not affect AEMO’s rights to issue a further call notice or interim statement on the same grounds that gave rise to AEMO issuing the cancelled call notice or interim statement.

3.3.12 Typical accrual

(a) The typical accrual for a Market Participant at any time is the amount which AEMO determines would have been the outstandings of the Market Participant at that time had the spot prices and ancillary service prices and the trading amounts of the Market Participant been at the level of the average
spot price and ancillary service prices and average trading amounts of the Market Participant used by AEMO for the purposes of the most recent determination of the maximum credit limit of the Market Participant.

Note:
The value of the typical accrual of a Market Participant will be a negative amount if the average settlement amount of the Market Participant is a positive amount.

(b) AEMO must, on request from a Market Participant, provide that Market Participant with details of any typical accrual for that Market Participant.

3.3.13 Response to Call Notices

(a) Subject to clause 3.3.13(b), where AEMO has given a call notice to a Market Participant, the Market Participant must before 11.00 am (Sydney time) on the next business day following the issue of the call notice either:

(1) agree with AEMO to an increase in the Market Participant's maximum credit limit by an amount not less than the call amount, and provide to AEMO additional credit support where, by virtue of the increase in the maximum credit limit, the Market Participant no longer complies with its obligations under clause 3.3.5;

(2) (where clause 3.3.13(a)(1) is not satisfied) pay to AEMO in cleared funds a security deposit of an amount not less than the call amount;

(3) lodge a reallocation request of an amount which is not less than the call amount and which is accepted by AEMO; or

(4) provide to AEMO any combination of clauses 3.3.13(a)(1), (2) and (3) such that the aggregate of the amount which can be drawn under the additional credit support provided and the amount of the security deposit paid and the amount of the reallocation request accepted by AEMO is not less than the call amount.

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(b) If AEMO gives a call notice to a Market Participant after 1:00 pm (Sydney time), then AEMO is deemed to have given that call notice on the next business day for the purposes of this clause.

3.3.13A Application of monies in the security deposit fund

(a) Subject to clauses 3.3.13A(b) and (e), AEMO may apply money from the security deposit fund recorded as a credit balance in the name of a Market Participant in payment of monies owing by that Market Participant to AEMO:

(1) in respect of any final statement previously given to that Market Participant which has not been fully paid by the appointed time on the due date and remains unpaid; or

(2) at the time of issuing any final statement,
in which case AEMO may set off all, or part of, any amount by which a Market Participant is in credit in the security deposit fund at that time against any amounts owing to AEMO under the final statement.

(b) Subject to clause 3.3.13A(c):

(1) a Market Participant may, by giving notice at least one business day prior to the due time for the issue of a final statement, seek agreement with AEMO on the arrangements to apply to the application of security deposits paid by that Market Participant under clause 3.3.8A against amounts owing to AEMO under a particular final statement or final statements; and

(2) AEMO must apply the security deposits in accordance with an agreement reached under clause 3.3.13A(b)(1).

If agreement is not reached between AEMO and the Market Participant under this clause, then AEMO has a discretion to apply the security fund of that Market Participant in payment of moneys that the Market Participant owes AEMO as set out in clauses 3.3.13A(a)(1) and (2).

(c) Despite any agreement under clause 3.3.13A(b), if a default event occurs in relation to a Market Participant, then AEMO has a discretion as to which amounts owing to AEMO under final statements it applies or partially applies security deposits paid by that Market Participant under clause 3.3.8A.

(d) In the case of security deposits paid by a Market Participant in the security deposit fund under clause 3.3.13, AEMO has a discretion as to which final statements it applies or partially applies those monies against.

(e) However, in exercising its discretion in clauses 3.3.13A(b), (c) or (d), if a Market Participant pays AEMO a security deposit, then AEMO must apply any remaining portion of the security deposit (taking into account deductions for any liabilities or expenses of the security deposit fund) against the longest outstanding amounts owing to AEMO under final statements issued not later than the final statement for the billing period in which the security deposit was paid to AEMO. If, for any reason, AEMO has not fully applied such security deposit within this time, then AEMO must apply the remainder to amounts owing to AEMO under the next final statement or statements until it has been fully applied.

(f) If:

(1) a Market Participant has a credit balance in the security deposit fund and ceases, or intends to cease, being a Market Participant; and

(2) that Market Participant has paid all money owing to AEMO and AEMO reasonably considers that the Market Participant will not owe any money to AEMO in the future arising from that person's activities as a Market Participant,

then AEMO must return any credit balance for that Market Participant in the security deposit fund to that Market Participant (subject to deduction for any liabilities and expenses of the security deposit fund).
(g) If, for any reason, there is a debit balance in the security deposit fund for a Market Participant, then the Market Participant must pay that amount to AEMO. For this purpose, AEMO may:

(1) include that amount in the next final statement; or

(2) issue an account to that Market Participant for payment of that debit balance and the Market Participant must pay that amount within 2 business days.

3.3.14 Potential value of a transaction

At any time, the potential value of a transaction, or of any bid or offer by a Market Participant to effect a transaction, under which the trading amount payable to AEMO is determined by reference to one or more specified regional reference prices or ancillary service prices, is the dollar amount determined by this procedure:

(a) the transaction is first tested to determine the trading amount which would result for the Market Participant if the regional reference price or ancillary service price applicable to the transaction was equal to the scheduled high price;

(b) the transaction is then tested to determine the trading amount which would result for the Market Participant if the regional reference price or ancillary service price applicable to the transaction was equal to the scheduled low price;

(c) if the trading amount resulting for both tests is a positive amount or zero, then the potential value of the transaction is zero;

(d) if the trading amount resulting for either test is a negative amount, then the potential value of the transaction is the absolute value of the negative amount (or, where both tests produce a negative amount, the potential value of the transaction is the absolute value of the most negative amount).

3.3.15 Trading margin

At any time, the trading margin for a Market Participant is a dollar amount equal to the amount by which its trading limit exceeds its current outstandings due to AEMO and if the outstandings are equal to or exceed the trading limit, the trading margin is zero.

3.3.16 Limitation on entry of transactions

(a) A Market Participant must not submit any bid or offer to effect any transaction with AEMO where the potential value of that transaction, plus the potential value of all other uncompleted transactions, exceeds the trading margin for the Market Participant.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(b) A transaction is an uncompleted transaction if some or all of the trading intervals to which that transaction relates have not yet occurred.
3.3.17  Scheduled prices

(a) The scheduled high price and the scheduled low price are amounts determined by AEMO in its absolute discretion from time to time as a basis upon which to determine the potential value of a transaction in accordance with clause 3.3.14.

(b) AEMO may determine different scheduled high prices and scheduled low prices for each region.

(c) The scheduled high price for energy and market ancillary services cannot be greater than the market price cap and the scheduled low price for:
   (i) energy, cannot be less than the market floor price; and
   (ii) market ancillary services, cannot be less than zero.

(d) AEMO must notify all Market Participants without delay of any determination of scheduled high prices and scheduled low prices.

(e) For Market Participants who do not trade in the spot market, the scheduled high price shall be the market price cap and the scheduled low price shall be zero.

3.3.18  Additional credit support

(a) Where at any time the aggregate potential value of a Market Participant's uncompleted transactions exceeds the trading margin for the Market Participant (including without limitation where this is a result of a redetermination of scheduled high prices or scheduled low prices) the Market Participant must provide to AEMO additional credit support satisfying the criteria in clause 3.3.2 for an amount not less than the amount by which the trading margin is exceeded. The Market Participant must procure that the additional credit support is provided to AEMO within 24 hours after AEMO has notified the Market Participant that additional credit support is required.

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(b) Credit support required pursuant to this clause 3.3.18 is in addition to and not inclusive of the credit support which a Market Participant is required to procure pursuant to other provisions of the Rules.

3.3.19  Consideration of other Market Participant transactions

(a) For the purposes of determining the prudential requirements to be satisfied by Market Participants in accordance with this rule 3.3, AEMO must consult with Market Participants and any other person AEMO considers appropriate.

(b) AEMO is not required to meet its obligations under clause 3.3.19(a) in any way which increases AEMO's risks in the collection of moneys owed to it in accordance with any of the provisions of the Rules.
3.4  Spot Market

3.4.1  Establishment of spot market

(a)  *AEMO* must establish and operate a *spot market* as a mechanism for:

(1)  balancing electricity *supply* and demand;

(2)  acquiring *market ancillary services*; and

(3)  setting a *spot price* for electricity at each *regional reference node* and *market connection point* for each *trading interval* and *ancillary service prices* at each *regional reference node* for each *dispatch interval*.

(b)  *AEMO* must determine and *publish* in accordance with rule 3.9:

(1)  a *spot price* for energy to apply at each *regional reference node* in each *trading interval*; and

(2)  *ancillary service prices* to apply at each *regional reference node* for each *dispatch interval*.

3.4.2  Trading day and trading interval

(a)  A *trading interval* is a 30 minute period ending on the hour or on the half hour.

(b)  A *trading interval* is identified by the *time* at which it ends.

(c)  The *trading day* in the *spot market* will be the 24 hour period commencing at 4.00 am *Eastern Standard Time*.

3.4.3  Spot market operations timetable

(a)  *AEMO* must operate the *spot market* according to the *timetable* which must be approved by the *AEMC* and *published* by *AEMO* following compliance with the *Rules consultation procedures*.

(b)  Subject to paragraph (b1), if *AEMO* wishes to change the *timetable* at any time, it may do so following compliance with the *Rules consultation procedures*.

(b1)  *AEMO* may make minor and administrative amendments to the *timetable* without complying with the *Rules consultation procedures*.

(c)  If *AEMO* amends the *timetable* in accordance with paragraph (b) or (b1), *AEMO* must:

(1)  *publish* the amended *timetable*; and

(2)  operate the *spot market* according to the *timetable* as amended.
3.5 Regions

3.5.1 [Deleted]

3.5.2 [Deleted]

3.5.3 [Deleted]

3.5.4 [Deleted]

3.5.5 [Deleted]

3.5.6 [Deleted]

3.6 Network Losses and Constraints

3.6.1 Inter-regional losses

(a) Inter-regional losses are electrical energy losses due to a notional transfer of electricity through regulated interconnectors from the regional reference node in one region to the regional reference node in an adjacent region.

(b) Inter-regional loss factors:

(1) describe the marginal electrical energy losses for electricity transmitted through regulated interconnectors from a regional reference node in one region to the regional reference node in an adjacent region for a particular time period and a defined range of operating conditions;

(2) to apply between each pair of adjacent regional reference nodes are to be determined as part of the central dispatch process using inter-regional loss factor equations derived in accordance with the methodology determined by AEMO pursuant to clause 3.6.1(c); and

(3) are to be used in the central dispatch process as a notional adjustment to relate the prices of electricity at regional reference nodes in adjacent regions so as to reflect the cost of inter-regional losses.

(c) AEMO must determine, publish and maintain, in accordance with the Rules consultation procedures, a methodology for the determination of inter-regional loss factor equations for a financial year, describing inter-regional loss factors between each pair of adjacent regional reference nodes in terms of significant variables.

(d) In preparing the methodology for the determination of inter-regional loss factor equations referred to in clause 3.6.1(c), AEMO must implement the following principles:

(1) Inter-regional loss factor equations are to apply for a financial year.

(2) Inter-regional loss factor equations must be suitable for use in central dispatch.

(3) Inter-regional loss factors are determined as part of the central dispatch process using inter-regional loss factor equations. The inter-regional loss factors must:
as closely as is reasonably practicable, describe the **marginal electrical energy losses** for electricity transmitted through the relevant **regulated interconnector** between the 2 relevant **regional reference nodes** in adjacent **regions** for each **trading interval** of the **financial year** in respect of which the relevant **inter-regional loss factor** equations apply; and

(ii) aim to minimise the impact on the **central dispatch** process of **generation** and **scheduled load** as compared to the **dispatch** of **generation** and **scheduled load** which would result from a fully optimised dispatch process taking into account the effect of losses.

(4) **Inter-regional loss factor** equations are determined using forecast **load** and **generation** data and, if required, modelled **load** and **generation** data for the **financial year** in which the **inter-regional loss factor** equations are to apply. The forecast **load** and **generation** data and modelled **load** and **generation** data, if any, used must be that **load** and **generation** data prepared by **AEMO** pursuant to clause 3.6.2A.

(5) **Inter-regional loss factor** equations are determined by applying regression analysis to the **load** and **generation** data referred to in clause 3.6.1(d)(4) to determine:

(i) the variables which have a significant effect on the **marginal electrical energy losses** for electricity transmitted through each **regulated interconnector** for both directions of flow on those **regulated interconnectors**; and

(ii) the parameters that represent the relationship between each of those variables and the **marginal electrical energy losses**.

(e) **AEMO** must determine the **inter-regional loss factor** equations used to calculate **inter-regional loss factors** in each **financial year** in accordance with the methodology prepared and **published** by **AEMO** under clause 3.6.1(c).

(f) **AEMO** must **publish** the **inter-regional loss factor** equations determined under clause 3.6.1(e) by 1 April prior to the **financial year** in which they are to apply.

**3.6.2 Intra-regional losses**

(a) **Intra-regional losses** are **electrical energy losses** that occur due to the transfer of electricity between a **regional reference node** and **transmission network connection points** in the same **region**.

(b) **Intra-regional loss factors**:

(1) notionally describe the **marginal electrical energy losses** for electricity transmitted between a **regional reference node** and a **transmission network connection point** in the same **region** for a defined time period and associated set of operating conditions;

(2) will be either:

(i) two **intra-regional loss factors** where **AEMO** determines, in accordance with the methodology determined under clause
3.6.2(d), that one *intra-regional loss factor* does not, as closely as is reasonably practicable, describe the average of the *marginal electrical energy losses* for electricity transmitted between a *transmission network connection point* and the *regional reference node* for the *active energy* generation and consumption at that *transmission network connection point*; or

(ii) one static *intra-regional loss factor* in all other circumstances;

(2A) must be determined in accordance with the methodology determined by *AEMO* under clause 3.6.2(d) for each *transmission network connection point*;

(2B) apply for a *financial year*; and

(3) may, with the agreement of the *AER*, be averaged over an adjacent group of *transmission network connection points* within a single region. If averaging is used, the relevant *transmission network connection points* will be collectively defined as a *virtual transmission node* with a *loss factor* calculated as the volume weighted average of the *transmission loss factors* of the constituent *transmission network connection points*.

(b1) If *AEMO* determines two *intra-regional loss factors* for a *transmission network connection point* under clause 3.6.2(b)(2), *AEMO* must apply the *intra-regional loss factors* in *central dispatch* and *spot market transactions* in accordance with the procedure determined by *AEMO* under clause 3.6.2(d1).

(c) An *intra-regional loss factor* is to be used as a price multiplier that can be applied to the *regional reference price* to determine the *local spot price* at each *transmission network connection point* and *virtual transmission node*.

(d) *AEMO* must determine, *publish* and maintain, in accordance with *Rules consultation procedures*, a methodology for the determination of *intra-regional loss factors* to apply for a *financial year* for each *transmission network connection point*.

(d1) *AEMO* must determine, *publish* and maintain, in consultation with *Registered Participants*, a procedure that includes a description of the manner in which *AEMO* will, if two *intra-regional loss factors* apply to a *transmission network connection point*, apply two *intra-regional loss factors* in *central dispatch* and *spot market transactions*. The procedure determined under this paragraph (d1) must describe how *AEMO* will identify and measure the *generation* and *load* at each *transmission network connection point* and apply the relevant *intra-regional loss factor* against that generation or load.

(e) In preparing the methodology referred to in clause 3.6.2(d), *AEMO* must implement the following principles:

(1) *Intra-regional loss factors* are to apply for a *financial year*.

(2) An *intra-regional loss factor* must, as closely as is reasonably practicable, describe the average of the *marginal electrical energy losses* for electricity transmitted between a *transmission network connection point*.
point and the regional reference node in the same region for each trading interval of the financial year in which the intra-regional loss factor applies.

(2A) Intra-regional loss factors must aim to minimise the impact on the central dispatch process of generation and scheduled load compared to that which would result from a fully optimised dispatch process taking into account the effect of losses.

(3) Forecast load and generation data for the financial year for which the intra-regional loss factor is to apply must be used. The forecast load and generation data used must be that load and generation data prepared by AEMO pursuant to clause 3.6.2A.

(4) The load and generation data referred to in clause 3.6.2(e)(3) must be used to determine marginal loss factors for each transmission network connection point for each trading interval in the financial year to which the load and generation data relates.

(5) An intra-regional loss factor for a transmission network connection point is determined using a volume weighted average of the marginal loss factors for the transmission network connection point.

(6) In determining an intra-regional loss factor for a transmission network connection point, flows in network elements that solely or principally provide market network services will be treated as invariant, as the methodology is not seeking to calculate the marginal losses within such network elements.

(f) AEMO must calculate intra-regional loss factors for each transmission network connection point for each financial year in accordance with the methodology prepared and published by AEMO under clause 3.6.2(d).

(f1) By 1 April in each year, AEMO must publish the intra-regional loss factors revised under clause 3.6.2(f) and to apply for the next financial year.

(g) AEMO must, in accordance with the Rules consultation procedures, determine, publish and maintain the methodology which is to apply to the calculation of average transmission loss factors, determined in accordance with clause 3.6.2(b)(3), for each virtual transmission node proposed by a Distribution Network Service Provider.

(h) As soon as practicable after the publication of the methodology referred to in clause 3.6.2(g), and thereafter by 1 April in each year, AEMO must calculate and publish the transmission loss factors for each virtual transmission node, determined in accordance with clause 3.6.2(b)(3), that are to apply for the next financial year.

(i) Notwithstanding clauses 3.6.2(a) to (f1), AEMO must:

(1) determine an intra-regional loss factor in the financial year in which an intra-regional loss factor is to apply for a transmission network connection point which is established in that financial year in accordance with the procedure for establishing connection set out in
rule 5.3, provided that \textit{AEMO} did not determine an \textit{intra-regional loss factor} for the transmission network connection point pursuant to clause 3.6.2(f1) in the \textit{financial year} preceding that in which the \textit{connection point} is established; or

(2) revise an \textit{intra-regional loss factor} in the \textit{financial year} in which an \textit{intra-regional loss factor} is to apply for a transmission network connection point which is modified in that \textit{financial year} in accordance with the procedure for modifying \textit{connection} set out in rule 5.3, provided that, in \textit{AEMO}'s reasonable opinion, the modification to that \textit{connection point} results in a material change in the capacity of the \textit{connection point}.

(j) \textit{AEMO} must, where required to determine an \textit{intra-regional loss factor} for an established or modified transmission network connection point under clause 3.6.2(i), do so as far as practicable in accordance with the methodology published by \textit{AEMO} pursuant to clause 3.6.2(d).

(k) For the purposes of clause 3.6.2(j), the forecast \textit{load} and \textit{generation} data used to calculate an \textit{intra-regional loss factor} for the transmission network connection point must be determined using the forecast \textit{load} and \textit{generation} data determined by \textit{AEMO} under clause 3.6.2A for other transmission network connection points in the same \textit{region} for that \textit{financial year} adjusted to take into account the effect of the established or modified \textit{connection point}. Notwithstanding this clause 3.6.2(k), \textit{Registered Participants} must comply with their obligations with respect to the provision of information to \textit{AEMO}, for the purpose of determining new or revised \textit{intra-regional loss factors} for \textit{connection points} that are established or modified during the \textit{financial year} in which the \textit{intra-regional loss factors} are to apply, specified by the methodology developed and published by \textit{AEMO} under clause 3.6.2A.

(l) In the case of a \textit{connection point} that is established in the \textit{financial year} in which an \textit{intra-regional loss factor} is to apply:

(1) an \textit{intra-regional loss factor} determined by \textit{AEMO} in accordance with clause 3.6.2(i) will apply from the time an \textit{intra-regional loss factor} is determined and published by \textit{AEMO}; and

(2) \textit{AEMO} must use reasonable endeavours to determine and publish an \textit{intra-regional loss factor} at least 45 \textit{business days} prior to the commencement of operation of the established \textit{connection point}, where the relevant \textit{Registered Participants} comply with any applicable requirements and deadlines for the provision of information to \textit{AEMO} specified by the methodology published by \textit{AEMO} under clause 3.6.2A.

(m) In the case of a \textit{connection point} that is modified in the \textit{financial year} in which an \textit{intra-regional loss factor} is to apply:

(1) an \textit{intra-regional loss factor} determined by \textit{AEMO} in accordance with clause 3.6.2(i) will apply from the date when the modification to the \textit{connection point} takes effect; and

(2) \textit{AEMO} must use reasonable endeavours to publish an \textit{intra-regional loss factor} at least 45 \textit{business days} prior to the date when the modification
to the connection point takes effect, where the relevant Registered Participants comply with any applicable requirements and deadlines for the provision of information to AEMO specified by the methodology published by AEMO under clause 3.6.2A.

(n) For the avoidance of doubt, where AEMO determines an intra-regional loss factor for a transmission network connection point under clause 3.6.2(i), which is to apply in the financial year in which the transmission network connection point is established or modified, the intra-regional loss factors for all other transmission network connection points for that financial year, determined in accordance with clauses 3.6.2(a) to (g), must remain unchanged.

3.6.2A Load and generation data used to determine inter-regional loss factor equations and intra-regional loss factors

(a) AEMO must prepare load and generation data for each financial year to be used in both the determination of inter-regional loss factor equations under clause 3.6.1 and intra-regional loss factors under clause 3.6.2 in accordance with the methodology determined, published and maintained by AEMO for this purpose, under clause 3.6.2A(b).

(b) AEMO must determine, publish and maintain, in accordance with the Rules consultation procedures, a methodology for:

(1) forecasting the load and generation data to be used in both the determination of inter-regional loss factor equations and intra-regional loss factors, including new or revised intra-regional loss factors for connection points that are established or modified, respectively, during the financial year in which the intra-regional loss factors are to apply;

(2) modelling additional load and generation data, where required, to be used in determining inter-regional loss factor equations; and

(3) the collection of relevant data from Registered Participants, including without limitation deadlines for the provision of that data by Registered Participants.

(c) The methodology developed and published by AEMO under clause 3.6.2A(b) must specify information reasonably required by AEMO to fulfil its obligations under clause 3.6.2A, including without limitation historic load and generation data, forecast energy and maximum demand data for a connection point and forecast data for any new loads. In particular, the methodology must specify information to be provided by Registered Participants that is in addition to the information provided by those Registered Participants under other provisions of the Rules.

(d) In preparing the methodology for forecasting and modelling load and generation data under clause 3.6.2A(b), AEMO must implement the following principles:

(1) The forecast load and generation data must be representative of expected load and generation in the financial year in which the inter-regional loss factor equations or intra-regional loss factors are to apply having regard to:
(i) actual load and generation data available for a 12 month period defined by the methodology with the objective to use the most recent load and generation data practicable;

(ii) projected load growth between each calendar month to which the actual load and generation data referred to in clause 3.6.2A(d)(1)(i) relates and the same calendar month in the financial year for which the forecast load and generation data is determined; and

(iii) the projected network configuration and projected network performance for the financial year in which the inter-regional loss factor equation or intra-regional loss factor, as the case may be, is to apply.

(2) Additional modelled load and generation data sets must only be used:

(i) in the determination of inter-regional loss factor equations under clause 3.6.1; and

(ii) where the range of forecast load and generation data is not sufficient to derive inter-regional loss factor equations to apply over the full range of transfer capability of the regulated interconnector.

(e) Registered Participants must comply with the obligations to provide information set out in the methodology developed and published by AEMO under this clause 3.6.2A, including the deadlines for the provision of that information and any other obligations with respect to the provision of that information set out in the methodology.

3.6.3 Distribution losses

(a) Distribution losses are electrical energy losses incurred in the conveyance of electricity over a distribution network.

(b) Distribution loss factors:

(1) notionally describe the average electrical energy losses for electricity transmitted on a distribution network between a distribution network connection point and a transmission network connection point or virtual transmission node for the financial year in which they apply;

(2) will be either:

   (i) a site specific distribution loss factor derived in accordance with the methodology determined by the AER or the Distribution Network Service Provider pursuant to clause 3.6.3(h), for each distribution network connection point of the following types:

       (A) a connection point for an embedded generating unit with actual generation of more than 10MW, based on the most recent data available for a consecutive 12 month period at the time of determining the distribution loss factor. Where relevant data is not available for a consecutive 12 month
period as a distribution network connection point is newly established or has been modified, a Network Service Provider may determine whether an embedded generating unit has generation of more than 10MW, based on its best projection of generation in the financial year in which the distribution loss factor is to apply, taking into account the terms of the relevant connection agreement;

(B) a connection point for an end-user with actual or forecast load of more than 40GWh or an electrical demand of more than 10MW, based on the most recent data available for a consecutive 12 month period at the time of determining the distribution loss factor. Where relevant data is not available for a consecutive 12 month period as a distribution network connection point is newly established or has been modified, a Network Service Provider may determine whether an end-user has load of more than 40GWh or forecast peak load of more than 10MW, based on its best projection of load in the financial year in which the distribution loss factor is to apply, taking into account the terms of the relevant connection agreement;

(C) a connection point for a Market Network Service Provider; and

(D) a connection point between two or more distribution networks; or

(ii) derived, in accordance with the methodology determined by the AER or the Distribution Network Service Provider pursuant to clause 3.6.3(h), using the volume weighted average of the average electrical energy loss between the transmission network connection point or virtual transmission node to which it is assigned and each distribution network connection point or virtual transmission node in the relevant voltage class (determined in accordance with clause 3.6.3(d)(2)) assigned to that transmission network connection point or virtual transmission node, for all connection points on a distribution network not of a type described in clause 3.6.3(b)(2)(i);

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(3) are to be used in the settlement process as a notional adjustment to the electrical energy, expressed in MWh, flowing at a distribution network connection point in a trading interval to determine the adjusted gross energy amount for that connection point in that trading interval, in accordance with clause 3.15.4.
(b1) Where a Generator, or a Small Generation Aggregator, meets the reasonable cost of the Distribution Network Service Provider in performing the necessary calculation in respect of a generating unit of up to 10MW or 40GWh per annum capacity, the Distribution Network Service Provider must calculate a site specific distribution loss factor that, notwithstanding any other provision of the Rules to the contrary, for the purposes of the Rules is to apply in respect of that generating unit on the same basis as applies for a generating unit of more than 10MW or 40GWh per annum capacity as though the generating unit were a unit of more than 10MW or 40GWh per annum capacity.

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

c) Each Distribution Network Service Provider must assign each connection point on its distribution network, of a type described in clause 3.6.3(b)(2)(i), to a single transmission network connection point taking into account normal network configurations and predominant load flows.

(d) Each Distribution Network Service Provider must assign each connection point on its distribution network, not of a type described in clause 3.6.3(b)(2)(i):

(1) where practicable, to a single transmission network connection point or otherwise, to a virtual transmission node, taking into account normal network configurations and predominant load flows; and

(2) to a class of distribution network connection points based on the location of, voltage of and pattern of electrical energy flows at the distribution network connection point.

e) So far as practicable, the assignment of connection points on the distribution network to:

(1) transmission network connection points under clause 3.6.3(c); or

(2) transmission network connection points or virtual transmission nodes and a class of distribution network connection points under clause 3.6.3(d),

must be consistent with the geographic boundaries of the pricing zones for use in distribution service pricing, and the voltage levels incorporated within those pricing zones.

(f) The assignment of connection points on a distribution network:

(1) to a single transmission network connection point under clause 3.6.3(c); or
Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(2) to a transmission network connection point or virtual transmission node and a class of distribution network connection points under clause 3.6.3(d),

is subject to the approval of the AER and the Distribution Network Service Provider must inform AEMO of such approved assignments.

(g) Distribution loss factors must be determined by a Distribution Network Service Provider for all connection points on its distribution network either individually, for all connection points assigned to a single transmission network connection point under clause 3.6.3(c), or collectively, for all connection points assigned to a transmission network connection point or a virtual transmission node and a particular distribution network connection point class under clause 3.6.3(d), in accordance with:

(1) the methodology developed, published and maintained by the AER for the determination of distribution loss factors; or

(2) where the AER has not published a methodology under clause 3.6.3(g)(1), the methodology developed, published and maintained by the Distribution Network Service Provider for the determination of distribution loss factors.

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(h) The methodology for the determination of distribution loss factors referred to in clause 3.6.3(g) must be developed having regard to the following principles:

(1) The aggregate of the adjusted gross energy amounts for a distribution network, determined in accordance with clause 3.15.4 using the distribution loss factors for the financial year in which the distribution loss factors are to apply should equal, as closely as is reasonably practicable, the sum of:

(i) the amount of electrical energy, expressed in MWh, flowing at all connection points in the distribution network in the financial year in which the distribution loss factors are to apply; and

(ii) the total electrical energy losses incurred on the distribution network in the financial year in which the distribution loss factors are to apply.

(2) The methodology used to determine distribution loss factors for a financial year should incorporate provisions requiring a Distribution Network Service Provider to undertake a reconciliation between the aggregate of the adjusted gross energy amounts for its distribution
network for the previous financial year determined in accordance with clause 3.15.4 using the distribution loss factors that applied for connection points in that distribution network in the previous financial year and the sum of:

(i) the amount of electrical energy, expressed in MWh flowing, at all connection points in its distribution network in the previous financial year; and

(ii) the total electrical energy losses incurred on its distribution network in the previous financial year.

(3) The distribution loss factor for a distribution network connection point, other than those described in clause 3.6.3(b)(2)(i), is determined using a volume weighted average of the average electrical energy loss between the transmission network connection point or virtual transmission node to which it is assigned and each distribution network connection point in the relevant class of distribution network connection points assigned to that transmission network connection point or virtual transmission node for the financial year in which the distribution loss factor is to apply.

(4) The distribution loss factor for a distribution network connection point described in clause 3.6.3(b)(2)(i) is determined using the average electrical energy loss between the distribution network connection point and the transmission network connection point to which it is assigned in the financial year in which the distribution loss factor is to apply.

(5) In determining the average electrical energy losses referred to in clauses 3.6.3(h)(3) and (4), the Distribution Network Service Provider must use the most recent actual load and generation data available for a consecutive 12 month period but may adjust this load and generation data to take into account projected load and/or generation growth in the financial year in which the distribution loss factors are to apply.

(6) In determining distribution loss factors, flows in network elements that solely or principally provide market network services will be treated as invariant, as the methodology is not seeking to calculate the marginal losses within such network elements.

(i) Each year the Distribution Network Service Provider must determine the distribution loss factors to apply in the next financial year in accordance with clause 3.6.3(g) and provide these to AEMO for publication by 1 April. Before providing the distribution loss factors to AEMO for publication, the Distribution Network Service Provider must obtain the approval of the AER for the distribution loss factors it has determined for the next financial year.

3.6.4 Network constraints

(a) Conveyance of electricity between regions through a regulated interconnector is constrained when for operational reasons it is not acceptable for the regulated interconnector to transfer the level of electricity between regions that would be transferred if the limitation was removed and the condition
impacts on the dispatch of other regulated interconnectors, generation, scheduled network services or loads.

(a1) Conveyance of electricity between regions by means of a scheduled network service is constrained when the dispatch of the relevant scheduled network service is limited by the notified available capacity or ramp rate and the limitation impacts on the dispatch of generation, regulated interconnectors, other scheduled network services or loads.

(b) Conveyance of electricity within a region is constrained when for operational reasons it is not acceptable for a network to transfer the level of electricity between different parts of the region that would be transferred if the limitation was removed and the condition impacts on the dispatch of generation, scheduled network services or loads.

(c) For every trading interval AEMO must record any constraints including a description and the duration of the constraint.

(d) Any constraints which occur within a region or between regions must be taken into account in the dispatch process under clause 3.8.10.

### 3.6.5 Settlements residue due to network losses and constraints

(a) Settlements residue will be allocated, and distributed or recovered by AEMO in accordance with the following principles:

1. full effect is to be given to the jurisdictional derogations contained in Chapter 9 relating to settlements residue;
2. the portion of the settlements residue attributable to regulated interconnectors (as adjusted to take into account the effect of any applicable jurisdictional derogations referred to in subparagraph (1) will be distributed or recovered in accordance with rule 3.18;
3. the remaining settlements residue, including the portion of settlements residue due to intra-regional loss factors, will be distributed to or recovered from the appropriate Transmission Network Service Providers (which will not include Market Network Service Providers);

3A) [Deleted]

4. if the settlements residue arising in respect of a trading interval, after taking into account any relevant adjustment in accordance with clauses 5.7.7(aa)(3) or (ab), is a negative amount then, in respect of the billing period in which the negative settlements residue arises then:

   i. AEMO must recover the amount from the appropriate Transmission Network Service Provider at a payment time, interval, and by a method, determined by AEMO following consultation with Transmission Network Service Providers. AEMO may determine that the appropriate Transmission Network Service Provider is to pay the negative settlements residue amount by a date prior to the date for payment of final statements under clause 3.15.16;
(ii) the appropriate Transmission Network Service Provider must pay the negative settlements residue amount in accordance with AEMO's determination under subparagraph (4)(i);

(4A) if interest costs are incurred by AEMO in relation to any unrecovered negative settlements residue amount referred to in subparagraph (4), then, in respect of the billing period in which the negative settlements residue arises then:

(i) AEMO must recover the interest costs from the appropriate Transmission Network Service Provider at a payment time, interval, and by a method, determined by AEMO following consultation with Transmission Network Service Providers. AEMO may determine that the appropriate Transmission Network Service Provider is to pay the interest cost amount by a date prior to the date for payment of final statements under clause 3.15.16; and

(ii) the appropriate Transmission Network Service Provider must pay the interest cost amount in accordance with AEMO's determination under subparagraph (4A)(i);

(4B) for the purposes of subparagraphs (3), (4) and (4A), the appropriate Transmission Network Service Provider is:

(i) in the case of inter-regional settlements residue:

(A) if there is more than one Transmission Network Service Provider in the importing region, the Co-ordinating Network Service Provider; or

(B) if there is no Co-ordinating Network Service Provider in the importing region, the Transmission Network Service Provider to which a transmission determination currently applies in that region;

(ii) in the case of intra-regional settlements residue:

(A) if there is more than one Transmission Network Service Provider in the region, the Co-ordinating Network Service Provider; or

(B) if there is no Co-ordinating Network Service Provider in the region, the Transmission Network Service Provider to which a transmission determination currently applies in that region;

(4C) [Deleted]

(4D) for the purposes of paragraph (4B), importing region means the region to which electricity is transferred during the relevant trading interval from another region through regulated interconnectors; and

(5) [Deleted]
(6) any portion of settlements residue distributed to a Network Service Provider or amount paid on that portion under clause 3.15.10A (if any), or rule 3.18 to a Network Service Provider, including any such payments as adjusted by a routine revised statement or special revised statement issued under rule 3.15, net of any portion of settlements residue recovered from the Network Service Provider in accordance with clause 3.6.5(a)(4), will be used to offset network service charges.

(b) A Transmission Network Service Provider or its jurisdictional delegate is a Market Participant for the purposes of clause 3.3.1 and rule 3.15 (excluding clause 3.15.1(b)) but not otherwise.

(c) [Deleted]

3.7 Projected Assessment of System Adequacy

3.7.1 Administration of PASA

(a) AEMO must administer medium term and short term projected assessment of system adequacy processes to be known as PASA.

(b) The PASA is a comprehensive program of information collection, analysis, and disclosure of medium term and short term power system security and reliability of supply prospects so that Registered Participants are properly informed to enable them to make decisions about supply, demand and outages of transmission networks in respect of periods up to 2 years in advance.

(c) On a weekly basis AEMO must:

(1) collect and analyse information from all Scheduled Generators, Market Customers, Transmission Network Service Providers and Market Network Service Providers about their intentions for:

   (i) generation, transmission and market network service maintenance scheduling;

   (ii) intended plant availabilities;

   (iii) energy constraints;

   (iv) other plant conditions which could materially impact upon power system security and reliability of supply; and

   (v) significant changes to load forecasts previously notified to AEMO, for the following 24 months;

(2) prepare the unconstrained intermittent generation forecasts for the following 24 months; and

(3) following analysis and assessment of the information referred to in subparagraphs (1) and (2), publish information that will inform the market regarding forecasts of supply and demand.
(d) *AEMO* must use its reasonable endeavours to ensure that it publishes sufficient information to allow the *market* to operate effectively with a minimal amount of intervention by *AEMO*.

### 3.7.2 Medium term PASA

(a) The *medium term PASA* covers the 24 month period commencing from the Sunday after the *day* of publication with a daily resolution. Every week, *AEMO* must review and *publish* the outputs of the *medium term PASA* in accordance with the *timetable*.

(b) *AEMO* may publish additional updated versions of the *medium term PASA* in the event of *changes* which, in the judgment of *AEMO*, are materially significant.

(c) The following *medium term PASA inputs* are to be prepared by *AEMO*:

1. forecast *load* information for each *region* which is:
   
   (i) the 10% probability of exceedence daily *peak load*, most probable daily *peak load* and time of the peak on the basis of past trends, day type and special events including all forecast *scheduled load* and other *load* except for pumped storage *loads*;
   
   (ii) subsequently to be adjusted by an amount anticipated in the forecast as *scheduled load* by *load* bidders; and
   
   (iii) an indicative half hourly *load* profile for each day type for each *region* for each month of the year;

2. *Deleted*

3. forecast *network constraints* known to *AEMO* at the time;

4. an *unconstrained intermittent generation forecast* for each *semi-scheduled generating unit* for each *day*.

(d) The following *medium term PASA inputs* must be submitted by each relevant *Scheduled Generator* or *Market Participant* in accordance with the *timetable*:

1. *PASA availability* of each scheduled generating unit, scheduled load or scheduled network service for each *day* taking into account the ambient weather conditions forecast at the time of the 10% probability of exceedence *peak load* (in the manner described in the procedure prepared under paragraph (g)); and

2. weekly *energy constraints* applying to each scheduled generating unit or scheduled load.

**Note**

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(e) *Network Service Providers* must provide to *AEMO* an outline of planned *network outages* in accordance with the *timetable* and provide to *AEMO* any
other information on planned network outages that is reasonably requested by AEMO to assist AEMO to meet its obligations under paragraph (f)(6).

**Note**

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(f) AEMO must prepare and publish the following information in respect of each day (unless otherwise specified in subparagraphs (1) to (6)) covered by the medium term PASA in accordance with clause 3.13.4(a):

1. forecasts of the 10% probability of exceedence peak load, and most probable peak load, excluding the relevant aggregated MW allowance referred to in subparagraph (2), and adjusted to make allowance for scheduled load;

1A) [Deleted]

2. the aggregated MW allowance (if any) to be made by AEMO for generation from non-scheduled generating systems in each of the forecasts of the 10% probability of exceedence peak load and most probable peak load referred to in subparagraph (1);

3. in respect of each of the forecasts of the 10% probability of exceedence peak load and most probable peak load referred to in subparagraph (1), a value that is the sum of that forecast and the relevant aggregated MW allowance referred to in subparagraph (2);

4. forecasts of the most probable weekly energy for each region;

5. aggregate generating unit PASA availability for each region;

5A) aggregate capacity for each region that can be generated continuously, calculated by adding the following categories:

(i) the capacity of scheduled generating units in the region that are able to operate at the PASA availability; and

(ii) the forecast generation of semi-scheduled generating units in the region as provided by the unconstrained intermittent generation forecasts;

5B) aggregate capacity for each region that cannot be generated continuously at the PASA availability of the scheduled generating units in the region due to specified weekly energy constraints; and

6. identification and quantification of:

(i) any projected violations of power system security;

(ii) any projected failure to meet the reliability standard as assessed in accordance with the reliability standard implementation guidelines;

(iii) [Deleted]
(iv) forecast *interconnector* transfer capabilities and the discrepancy between forecast *interconnector* transfer capabilities and the forecast capacity of the relevant *interconnector* in the absence of *outages* on the relevant *interconnector* only; and

(v) when and where *network constraints* may become binding on the dispatch of generation or load.

(g) *AEMO* must publish the procedure it uses for preparation of the *medium term PASA*.

### 3.7.3 Short term PASA

(a) The *short term PASA* must be published at least daily by *AEMO* in accordance with the timetable.

(b) The *short term PASA* covers the period of six *trading days* starting from the end of the *trading day* covered by the most recently *published pre-dispatch schedule* with a *trading interval resolution*.

(c) *AEMO* may *publish* additional updated versions of the *short term PASA* in the event of changes which, in the judgement of *AEMO*, are materially significant.

(d) The following *short term PASA inputs* are to be prepared by *AEMO*:

1. forecast load information for each *region* which is to include:
   
   (i) the 10% probability of exceedence half-hourly load and most probable half hourly load on the basis of past trends, day type, and special events; and
   
   (ii) all scheduled load and other load except for pumped storage loads,

   which must subsequently be adjusted in accordance with *dispatch bids* for scheduled load;

2. [Deleted]

3. forecast network constraints known to *AEMO* at the time; and

4. an unconstrained intermittent generation forecast for each semi-scheduled generating unit for each trading interval.

(e) The following *short term PASA inputs* must be submitted by each relevant *Scheduled Generator* and *Market Participant* in accordance with the timetable and must represent the *Scheduled Generator's* or *Market Participant's* current intentions and best estimates:

1. available capacity of each scheduled generating unit, scheduled load or scheduled network service for each trading interval under expected market conditions;

2. *PASA availability* of each scheduled generating unit, scheduled load or scheduled network service for each trading interval; and

3. [Deleted]
(4) projected daily energy availability for energy constrained scheduled generating units and energy constrained scheduled loads.

**Note**

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(f) If AEMO considers it reasonably necessary for adequate power system operation and the maintenance of power system security and reliability of supply, Registered Participants who may otherwise be exempted from providing inputs for the PASA process must do so to the extent specified by AEMO.

**Note**

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(g) Network Service Providers must provide to AEMO an outline of planned network outages in accordance with the timetable and provide to AEMO any other information on planned network outages that is reasonably requested by AEMO to assist AEMO to meet its obligations under clause 3.7.3(h)(5).

**Note**

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(h) AEMO must prepare and publish the following information for each trading interval (unless otherwise specified in subparagraphs (1) to (5)) in the period covered by the short term PASA in accordance with clause 3.13.4(c):

(1) forecasts of the most probable load (excluding the relevant aggregated MW allowance referred to in subparagraph (4B)) plus reserve requirement (as determined under clause 3.7.3(d)(2)), adjusted to make allowance for scheduled load, for each region;

(2) forecasts of load (excluding the relevant aggregated MW allowance referred to in subparagraph (4B)) for each region with 10% and 90% probability of exceedence;

(3) forecasts of the most probable energy (excluding the relevant aggregated MW allowance referred to in subparagraph (4B)) for each region and trading day;

(4) aggregate generating unit availability (excluding the relevant aggregated MW allowance referred to in subparagraph (4B)) for each region;

(4AA) aggregate capacity (excluding the relevant aggregated MW allowance referred to in subparagraph (4B)) for each region, after allowing for the impact of network constraints, that can be generated continuously, calculated by adding the following categories:
the available capacity of scheduled generating units that are able to operate at the availability as notified to AEMO under paragraph (e)(1); and

(ii) the forecast generation of semi-scheduled generating units as provided by the unconstrained intermittent generation forecasts;

(4AB) aggregate capacity (excluding the relevant aggregated MW allowance referred to in subparagraph (4B)) for each region, after allowing for the impact of network constraints, that cannot be generated continuously at the available capacity referred to in subparagraph (4AA)(i) due to specified daily energy constraints; and

(4A) aggregate generating unit PASA availability (excluding the relevant aggregated MW allowance referred to in subparagraph (4B)) for each region;

(4B) the aggregated MW allowance (if any) to be made by AEMO for generation from non-scheduled generating systems in each forecast:

(i) of the most probable load referred to in clause 3.7.3(h)(1); and

(ii) referred to in clauses 3.7.3(h)(2), (3), (4), (4A), (4AA) and (4AB);

(4C) in respect of each forecast:

(i) of the most probable load referred to in clause 3.7.3(h)(1);

(ii) referred to in clauses 3.7.3(h)(2), (3), (4), (4A), (4AA) and (4AB), a value that is the sum of that forecast and the relevant aggregated MW allowance (if any) referred to in clause 3.7.3(4B); and

(5) identification and quantification of:

(i) any projected violations of power system security;

(ii) any projected failure to meet the reliability standard as assessed in accordance with the reliability standard implementation guidelines;

(iii) [Deleted]

(iv) forecast interconnector transfer capabilities and the discrepancy between forecast interconnector transfer capabilities and the forecast capacity of the relevant interconnector in the absence of outages on the relevant interconnector only; and

(v) when and where network constraints may become binding on the dispatch of generation or load.

(i) If in performing the short term PASA AEMO identifies any projected failure to meet the reliability standard in respect of a region as assessed in accordance with the reliability standard implementation guidelines, then AEMO must use its reasonable endeavours to advise the Jurisdictional System Security...
Coordinator who represents a participating jurisdiction in that region of any potential requirements during such conditions to shed sensitive loads.

(j) AEMO must publish the procedure it uses for preparation of the short term PASA.

3.7A Congestion information resource

(a) The objective of the congestion information resource is to provide information in a cost effective manner to Registered Participants to enable them to understand patterns of network congestion and make projections of market outcomes in the presence of network congestion (the congestion information resource objective).

Development of congestion information resource

(b) To implement the congestion information resource objective, AEMO must develop and publish, in accordance with this rule 3.7A, an information resource comprising:

1. information on planned network events that are likely to materially affect network constraints in relation to a transmission system;

2. historical data on mis-pricing at transmission network nodes in the national electricity market; and

3. any other information that AEMO, in its reasonable opinion, considers relevant to implement the congestion information resource objective, which is to be known as the congestion information resource.

(c) The congestion information resource must contain at least the same level of detail as is required to be included in the interim congestion information resource published under clause 11.30.2.

(d) AEMO must develop, and amend from time to time, the congestion information resource:

1. consistently with the congestion information resource objective;

2. in accordance with the congestion information resource guidelines; and

3. to incorporate any new, or amend any existing, aspect of the congestion information resource where AEMO forms the view that such an amendment will improve the implementation of the congestion information resource objective.

(e) Subject to paragraph (f), AEMO must update and publish the information contained in the congestion information resource (whether in whole or in part) at intervals to be determined by AEMO in accordance with the congestion information resource guidelines.

(f) The intervals determined by AEMO for updating and publishing the congestion information resource must be included in the timetable.

(g) If there has been a material change to the information contained in the congestion information resource and AEMO considers Registered Participants...
require the new information prior to the next periodic update of the congestion information resource in accordance with paragraph (e), AEMO may provide Market Participants with the new information in accordance with the congestion information resource guidelines.

(h) AEMO must publish the first congestion information resource by 1 September 2011 and there must be a congestion information resource available at all times after that date.

(i) For the purpose of publishing the first congestion information resource under paragraph (b), AEMO may, subject to paragraph (d), publish the interim congestion information resource referred to in clause 11.30.2, as the first congestion information resource, in whole or in part.

(j) AEMO must not publish confidential information as part of, or in connection with, the congestion information resource

Congestion information resource guidelines

(k) AEMO must develop and publish guidelines (the congestion information resource guidelines) in relation to:

(1) the categories of information to be contained in the congestion information resource including the source of that information;

(2) the scope and type of information to be provided by Transmission Network Service Providers in accordance with paragraphs (n) and (o);

(3) the processes to be implemented by AEMO to obtain the information from Transmission Network Service Providers in accordance with paragraphs (n) and (o);

(4) the determination of the intervals for updating and publishing the congestion information resource under paragraph (e); and

(5) the processes to be implemented by AEMO for providing Registered Participants with information under paragraph (g).

(l) AEMO must develop and publish the first congestion information resource guidelines in accordance with the Rules consultation procedures by 1 September 2010 and there must be a set of congestion information resource guidelines available and up to date at all times after that date.

(m) AEMO must amend the congestion information resource guidelines in accordance with the Rules consultation procedures.

Information of Transmission Network Service Providers

(n) In addition to the obligations imposed on Transmission Network Service Providers by rule 3.7, Transmission Network Service Providers must provide AEMO with the information specified in the congestion information resource guidelines as information that is to be provided by them:

(1) in a form which clearly identifies confidential information; and

(2) in accordance with the congestion information resource guidelines.
Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(o) If there has been a material change to the information provided by a Transmission Network Service Provider under paragraph (n), the Transmission Network Service Provider must provide AEMO with the revised information as soon as practicable.

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(p) Information contained in the congestion information resource which has been provided by, or has been derived from information provided by, a Transmission Network Service Provider under this rule 3.7A:

1. must represent the Transmission Network Service Provider’s current intentions and best estimates regarding planned network events at the time the information is made available;
2. does not bind the Transmission Network Service Provider to comply with an advised outage program; and
3. may be subject to change due to unforeseen circumstances outside the control of the Transmission Network Service Provider.

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

3.7B Unconstrained intermittent generation forecast

(a) AEMO must prepare a forecast of the available capacity of each semi-scheduled generating unit (to be known as an unconstrained intermittent generation forecast) in accordance with this rule 3.7B for the purposes of:

1. the projected assessment of system adequacy process;
2. dispatch; and
3. pre-dispatch.

(b) A Semi-Scheduled Generator must:

1. submit to AEMO, in accordance with the timetable, the plant availability for each semi-scheduled generating unit for the purpose of paragraph (a) as soon as the Semi-Scheduled Generator becomes aware that the plant availability of the unit is at least 6MW below or above the nameplate rating of the unit; and
2. where the Semi-Scheduled Generator has submitted plant availability in accordance with subparagraph (1), notify AEMO in accordance with the timetable as soon as the Semi-Scheduled Generator becomes aware
of any changes to the plant availability of that semi-scheduled generating unit until such time as the plant availability of that semi-scheduled generating unit is no longer at least 6MW below or above the nameplate rating of the unit.

Note
This rule is classified as a civil penalty provision under the National Electricity (South Australia) Regulations.

(c) When preparing an unconstrained intermittent generation forecast for the purposes referred to in paragraph (a), AEMO must take into account:

(1) the maximum generation of the semi-scheduled generating unit provided by the Semi-Scheduled Generator as part of its bid and offer validation data;

(2) the plant availability of the semi-scheduled generating unit submitted by the Semi-Scheduled Generator under paragraph (b);

(3) the information obtained for the semi-scheduled generating unit from the remote monitoring equipment specified in clause S5.2.6.1;

(4) the forecasts of the energy available for input into the electrical power conversion process for each semi-scheduled generating unit;

(5) the energy conversion model for each semi-scheduled generating unit;

(6) the assumption that there are no network constraints otherwise affecting the generation from that semi-scheduled generating unit; and

(7) the timeframes of:
   (i) pre-dispatch;
   (ii) dispatch,
   (iii) medium term PASA; and
   (iv) short term PASA.

(d) NEMMCO must prepare the first unconstrained intermittent generation forecast for each semi-scheduled generating unit by 31 March 2009 and there must be an unconstrained intermittent generation forecast for each semi-scheduled generating unit available at all times after that date.

3.7C Energy Adequacy Assessment Projection

Purpose of EAAP

(a) The purpose of the energy adequacy assessment projection (or EAAP) is to make available to Market Participants and other interested persons an analysis that quantifies the impact of energy constraints on energy availability over a 24 month period under a range of scenarios.

EAAP principles

(b) The EAAP must:
(1) cover a 24 month period;

(2) be published at least once in every 12 month period and more frequently if required under paragraph (d);

(3) provide a probabilistic assessment of projected energy availability for each region;

(4) provide projected unserved energy levels for each region with a monthly resolution;

(5) provide aggregated information on the adequacy of energy availability for each scenario that AEMO defines for the purposes of the EAAP, based on information received from Registered Participants and on anticipated power system constraints;

(6) take into account:

(A) where relevant, the information and medium term PASA inputs referred to in clauses 3.7.1 and 3.7.2;

(B) where relevant, the matters AEMO considers in, and for the purposes of, preparing the NTNDP;

(C) *Generator Energy Limitation Frameworks* provided in accordance with paragraph (g), including GELFs that apply to more than one scheduled generating unit under clause 3.7C(k)(6) where those GELFs adequately represent the relevant generating units; and

(D) *GELF parameters* for each GELF which are provided in accordance with the EAAP guidelines and are updated in accordance with the timetable.

(c) AEMO must comply with the EAAP principles in preparing the EAAP.

**Administration of EAAP**

(d) AEMO must publish the EAAP:

(1) at least once in every 12 month period in accordance with the timetable; and

(2) as soon as practicable after becoming aware of any new information that may materially alter the most recently published EAAP.

(e) For the purposes of preparing the EAAP, a Scheduled Generator must provide AEMO with the following information in accordance with the timetable:

(1) updated GELF parameters for each GELF provided by it in accordance with paragraph (g); and

(2) other information that supplements the data provided under subparagraph (1) that is reasonably required by AEMO to study the scenarios defined in the EAAP guidelines.

(f) In considering whether information referred to in subparagraph (e)(2) is reasonably required, AEMO must have regard to the likely costs that may be
incurred by the Scheduled Generator in preparing and providing that information compared to the likely benefits from the use of that information for the purposes of the EAAP.

**Generator Energy Limitation Framework**

(g) A Scheduled Generator must prepare and submit to AEMO, in accordance with the EAAP guidelines and for the purposes of the EAAP, a description of the energy constraints that affect the ability of each of its scheduled generating units to generate electricity (GELF or Generator Energy Limitation Framework). The GELF must be in a form that adequately represents that generating unit sufficient for AEMO to include the GELF in the EAAP.

(h) A GELF submitted under paragraph (g) must be supplemented by GELF parameters for that GELF as defined in the EAAP guidelines, and those parameters must be updated:

1. at least every 12 months in accordance with the timetable; and
2. in accordance with the EAAP guidelines, if AEMO is required to publish an EAAP under paragraph (d)(2).

(i) Without limiting paragraph (h), if a Scheduled Generator has submitted a GELF under paragraph (g) and there has been a material change to any of its scheduled generating units which has an impact on the energy constraints associated with that GELF, the Scheduled Generator must revise and re-submit the GELF in accordance with that paragraph.

(j) Subject to paragraph (r), a GELF or information provided in relation to a GELF to AEMO must be treated by AEMO as confidential information.

**EAAP guidelines**

(k) AEMO must develop and publish guidelines (the EAAP guidelines) that:

1. define scenarios that AEMO must study in preparing the EAAP, including any scenarios that the Reliability Panel has identified for study for the purposes of preparing the EAAP;
2. define modelling assumptions for the EAAP;
3. define the components of a GELF that a Scheduled Generator must include in a GELF submitted under paragraph (g);
4. provide detail on the forms of the GELF sufficient for a Scheduled Generator to meet the requirements of paragraph (g);
5. define variable parameters specific to a GELF (GELF parameters) that are likely to have a material impact on the GELF and therefore the EAAP, and which may include, but are not limited to, parameters in relation to:
   (i) hydro storage including pump storage;
   (ii) thermal generation fuel;
   (iii) cooling water availability; and
(iv) gas supply limitations;

(6) define circumstances where a GELF submitted under paragraph (g) can apply to a collection of scheduled generating units that face common energy constraints due to their geographic location, access to fuel source or another similar reason;

(7) define the form of information to be submitted by each Scheduled Generator in accordance with paragraph (e);

(8) define arrangements for managing the confidentiality of information submitted to AEMO under this rule 3.7C; and

(9) specify when a Scheduled Generator is required to update a GELF under paragraph (h)(2).

(l) The scenarios that are defined for the purposes of subparagraph (k)(1) may include, but are not limited to:

(1) water conditions such as normal rainfall and drought;

(2) material restrictions on the supply of a significant fuel source;

(3) other limits on a fuel source for a major form of generation; and

(4) any other scenario that AEMO reasonably considers will have a material impact on the EAAP.

(m) AEMO must comply with the EAAP principles in preparing the EAAP guidelines.

(n) AEMO must comply with the EAAP guidelines in preparing the EAAP.

(o) AEMO must develop and publish the EAAP guidelines in accordance with the Rules consultation procedures.

(p) [Deleted]

(q) AEMO may from time to time in accordance with the Rules consultation procedures amend or replace the EAAP guidelines.

Provision of information to Scheduled Generators

(r) AEMO must provide to each Scheduled Generator, based on the relevant GELF, an estimate of the total energy production of the scheduled generating units of that Scheduled Generator for the period of the EAAP.

Review

(s) [Deleted].

3.7D Demand side participation information

Definitions

(a) In this rule:
contracted demand side participation means, in relation to a Registered Participant, a contractual arrangement under which a person and the Registered Participant agree to the curtailment of non-scheduled load or the provision of unscheduled generation in certain specified circumstances.

demand side participation information means the information referred to in subparagraph (e)(1).

demand side participation information guidelines means the guidelines as made and amended by AEMO in accordance with paragraphs (e) to (i).

unscheduled generation means generation from a generating system connected to a transmission system or distribution system which is not a scheduled generating system or semi-scheduled generating system.

Registered Participants to provide demand side participation information to AEMO

(b) Registered Participants must provide demand side participation information to AEMO in accordance with the demand side participation information guidelines.

AEMO to take into account demand side participation information

(c) AEMO must take into account the demand side participation information it receives under this rule 3.7D when developing or using load forecasts for the purposes of the exercise of its functions under the Rules.

(d) AEMO must publish details, no less than annually, on the extent to which, in general terms, demand side participation information received under this rule 3.7D has informed AEMO’s development or use of load forecasts for the purposes of the exercise of its functions under the Rules.

Demand side participation information guidelines

(e) AEMO must develop, maintain and publish guidelines that specify:

(1) the information Registered Participants must provide to AEMO in relation to:

(i) contracted demand side participation; and

(ii) to the extent not covered by subparagraph (1)(i), the curtailment of non-scheduled load or the provision of unscheduled generation in response to the demand for, or price of, electricity, which may include, but is not limited to:

(iii) the circumstances under which non-scheduled load may be curtailed or unscheduled generation may be provided;

(iv) the location at which non-scheduled load may be curtailed or unscheduled generation may be provided;

(v) the quantity of non-scheduled load that may be curtailed or unscheduled generation that may be provided; and
(vi) historic or current information;

(2) when Registered Participants must provide and update demand side participation information;

(3) how demand side participation information is to be provided, including, for example:

   (i) the format in which the information must be provided; and

   (ii) any information AEMO requires to assess the accuracy of the information;

(4) AEMO's methodology for assessing the accuracy of demand side participation information provided to it under this rule 3.7D; and

(5) the manner and form in which AEMO will publish details, in accordance with paragraph (d), on the extent to which demand side participation information has informed its load forecasts.

(f) In developing and amending the demand side participation information guidelines, AEMO must:

   (1) have regard to the reasonable costs of efficient compliance by Registered Participants with the guidelines compared to the likely benefits from the use of demand side participation information provided under this rule 3.7D in forecasting load for the purposes of the exercise of its functions under the Rules; and

   (2) subject to paragraph (g), consult with:

      (i) Registered Participants; and

      (ii) such other persons who, in AEMO’s reasonable opinion, have, or have identified themselves to AEMO as having, an interest in the demand side participation information guidelines,

in accordance with the Rules consultation procedures.

(g) AEMO is not required to comply with the Rules consultation procedures when making minor or administrative amendments to the demand side participation information guidelines.

(h) The demand side participation information guidelines must include a minimum period of 3 months between the date of publication and the date when the guidelines commence other than when the guidelines are amended under paragraph (g), in which case the guidelines may commence on the date of publication.

(i) There must be demand side participation information guidelines in place at all times after the first demand side participation information guidelines are published by AEMO under these Rules.
3.8 Central Dispatch and Spot Market Operation

3.8.1 Central Dispatch

(a) AEMO must operate a central dispatch process to dispatch scheduled generating units, semi-scheduled generating units, scheduled loads, scheduled network services and market ancillary services in order to balance power system supply and demand, using its reasonable endeavours to maintain power system security in accordance with Chapter 4 and to maximise the value of spot market trading on the basis of dispatch offers and dispatch bids.

(b) The central dispatch process should aim to maximise the value of spot market trading i.e. to maximise the value of dispatched load based on dispatch bids less the combined cost of dispatched generation based on generation dispatch offers, dispatched network services based on network dispatch offers, and dispatched market ancillary services based on market ancillary service offers subject to:

1. dispatch offers, dispatch bids and market ancillary service offers;
2. constraints:
   (i) due to availability and commitment; or
   (ii) in the case of semi-scheduling generating units, identified by the unconstrained intermittent generation forecast;
3. non-scheduled load requirements in each region;
4. power system security requirements determined as described in Chapter 4 and the power system security standards;
5. network constraints;
6. intra-regional losses and inter-regional losses;
7. constraints consistent with dispatch bid and dispatch offer data;
8. current levels of dispatched generation, load and market network services;
9. constraints imposed by ancillary services requirements;
10. arrangements designed to ensure pro-rata loading of tied dispatch bid and dispatch offer data;
11. ensuring that as far as reasonably practical, in relation to a AEMO intervention event:
    (A) the number of Affected Participants; and
    (B) the effect on interconnector flows,
    is minimised; and
12. the management of negative settlements residue, in accordance with clause 3.8.10 and any guidelines issued by AEMO under clause 3.8.10(c).
(c) **AEMO must establish procedures to allow relaxation of power system constraints** listed in clause 3.8.1(b) in order to resolve infeasible dispatch solutions, subject to the following principles:

1. the procedures are developed in consultation with Registered Participants to achieve a reasonable dispatch outcome while maintaining consistency with AEMO's obligations to maintain power system security and the pricing principles listed in clause 3.9.1; and

2. AEMO must report to Registered Participants any events requiring the relaxation of these constraints.

(d) **AEMO must develop and publish a dispatch algorithm** to be used by AEMO for the purpose of central dispatch and pricing in accordance with rules 3.8 and 3.9.

(e) **AEMO must use the dispatch algorithm** to determine the loading level in MW for each scheduled generating unit, semi-scheduled generating unit, scheduled network service or scheduled load in each dispatch interval in accordance with the principles set out in clause 3.8.1(b).

(e1) **AEMO must use the dispatch algorithm** to determine the quantity of each market ancillary service which will be enabled for each ancillary service generating unit or ancillary service load.

(e2) When AEMO determines the quantity of each market ancillary service which will be enabled, AEMO must determine:

1. the required quantity of each market ancillary service that may be sourced from any region (referred to as the global market ancillary service requirement); and

2. any required quantity of such market ancillary service which must only be sourced from one or more nominated regions (referred to as a local market ancillary service requirement).

(f) **AEMO may investigate from time to time:**

1. the scope for further development of the dispatch algorithm beyond the minimum requirements specified in clause 3.8.1(b); and

2. the sufficiency of the dispatch algorithm in meeting the minimum requirements specified in clause 3.8.1(b),

and following compliance with the Rules consultation procedures, publish a report setting out its recommendations.

### 3.8.2 Participation in central dispatch

(a) A Generator must submit generation dispatch offers in respect of its scheduled generating units or semi-scheduled generating units (as the case may be) for each trading day in accordance with clause 3.8.6.
Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(b) *Generation dispatch offers* for a *scheduled generating unit* must include a specified *self-dispatch level* and may include prices and MW quantities for increased or decreased levels of *generation* above or below this *self-dispatch level*.

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(b1) A *Scheduled Network Service Provider* must submit *network dispatch offers* in respect of each of its *scheduled network services* for each *trading day* in accordance with clause 3.8.6A.

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(c) Subject to clause 3.8.2(d), *dispatch bids* may be submitted by *Market Participants* in respect of *scheduled loads*, in accordance with clause 3.8.7, and may specify prices and MW quantities for any *trading interval* either for reductions or increases in *load*.

(c1) *Market ancillary service offers* may be submitted by *Ancillary Service Providers* in respect of *market ancillary services* in accordance with clause 3.8.7A.

(d) *Dispatch bids* and *market ancillary service offers* will only be included in the *central dispatch* process by *AEMO* if it is satisfied that adequate communication and/or telemetry is available to support the issuing of *dispatch instructions* and the audit of responses.

(e) If *AEMO* considers it reasonably necessary for adequate system operation and the maintenance of *power system security*, *Registered Participants* who may otherwise be exempted from participating in the *central dispatch* process must do so to the extent and in the capacity specified by *AEMO*.

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

3.8.3 **Bid and offer aggregation guidelines**

(a) *Scheduled Generators, Semi-Scheduled Generators* or *Market Participants* who wish to aggregate their relevant *generating units*, *scheduled network services* or *scheduled loads* for the purpose of *central dispatch* must apply to *AEMO* to do so.
(a1) Market Customers or Market Ancillary Service Providers (as applicable) who wish to aggregate two or more loads so they are treated as one ancillary service load for the purpose of central dispatch, must apply to AEMO to do so.

(b) AEMO must approve applications for aggregation made under paragraph (a) if the following conditions are fulfilled:

(1) aggregated generating units or loads must be:

   (i) connected at a single site with the same intra-regional loss factor or, if two intra-regional loss factors are determined for the site under clause 3.6.2(b)(2), the same two intra-regional loss factors; and

   (ii) operated by a single Scheduled Generator, Semi-Scheduled Generator or Market Participant;

(2) aggregated scheduled network services must be connected at the same two sites, have the same intra-regional loss factors, have the same distribution loss factors where applicable and be operated by the same Generator or Market Participant;

(3) power system security must not be materially affected by the proposed aggregation; and

(4) control systems such as automatic generation control systems must satisfy the Rules after aggregating.

(b1) AEMO must approve applications for aggregation made under paragraph (a1) if the following conditions are fulfilled:

(1) aggregated ancillary services loads must be connected within a single region and be operated by a single person (whether in its capacity as a Market Customer, Market Ancillary Service Provider or both);

(2) power system security must not be materially affected by the proposed aggregation; and

(3) control systems must satisfy the requirements of clause 2.3.5(e)(1) and (2) after aggregating.

(c) Notwithstanding that one or more of the conditions set out in paragraph (b) may not have been fulfilled by the Scheduled Generator, Semi-Scheduled Generator or Market Participant, AEMO may approve an application for aggregation provided that such aggregation would not materially distort central dispatch.

(d) Subject to paragraph (f), for the purposes of Chapter 3 (except rule 3.7B) and rule 4.9, a reference to a generating unit, scheduled load and scheduled network service is only taken as a reference to aggregated generating units, aggregated scheduled network services and aggregated scheduled loads aggregated in accordance with this clause 3.8.3.
AEMO must evaluate applications for aggregation and reply within 20 business days of receipt of the application setting out whether the application is to be approved and the conditions that apply to the proposed approval.

Scheduled Generators and Market Participants that have been granted aggregated status must, if required by AEMO, declare individual scheduled generating unit, scheduled network service or scheduled load availability and operating status to AEMO in the PASA process under rule 3.7 to allow power system security to be effectively monitored.

If a Scheduled Generator, Semi-Scheduled Generator or Market Participant's application for aggregation is denied by AEMO, AEMO must provide that applicant with reasons for that denial.

AEMO must maintain a database of aggregated scheduled generating units, semi-scheduled generating units, scheduled network services, scheduled loads and ancillary services loads and their components.

For the avoidance of doubt, semi-scheduled generating units which are registered as a single semi-scheduled generating unit under clause 2.2.7 are not aggregated semi-scheduled generating units for the purposes of Chapter 3 and rule 4.9.

### 3.8.3A Ramp rates

(a) This clause 3.8.3A applies to a Scheduled Generator, Semi-Scheduled Generator or Market Participant with generating units, scheduled network services and/or scheduled loads providing ramp rates to AEMO in accordance with the following clauses:

1. with respect to notification of scheduled capacity prior to dispatch:
   
   (i) clause 3.8.4(c);

   (ii) clause 3.8.4(e);

   (iii) clause 3.8.4(d);

2. with respect to offers for dispatch:

   (i) clause 3.8.6(a)(2);

   (ii) clause 3.8.6(g);

   (iii) clause 3.8.6A(b);

   (iv) clause 3.8.7(c); and

3. with respect to rebids, clause 3.8.22(b)

(b) Subject to clauses 3.8.3A(c) and 3.8.3A(i), a Scheduled Generator, Semi-Scheduled Generator or Market Participant to which this clause 3.8.3A applies must provide an up ramp rate and a down ramp rate to AEMO for each generating unit, scheduled network service and/or scheduled load that is:

1. at least:
(i) in the case of a scheduled network service or scheduled load that is not aggregated in accordance with clause 3.8.3, 3MW/minute; or

(ii) in the case of a scheduled network service or scheduled load that is aggregated in accordance with clause 3.8.3, the amount equal to the product of 3MW/minute and the number of individual scheduled network services or individual scheduled loads (and for the avoidance of doubt clause 3.8.3 does not apply to this paragraph (b)(1)(ii); or

(iii) in the case of a scheduled generating unit, or semi-scheduled generating unit that is not aggregated in accordance with clause 3.8.3, the generating unit minimum ramp rate requirement; or

(iv) in the case of a scheduled generating unit, or semi-scheduled generating unit that is aggregated in accordance with clause 3.8.3, the sum of the generating unit minimum ramp rate requirements for each individual generating unit (and for the avoidance of doubt clause 3.8.3 does not apply to this paragraph (b)(1)(iv)); and

(2) at most the relevant maximum ramp rate provided in accordance with clause 3.13.3(b).

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(c) A Scheduled Generator, Semi-Scheduled Generator or Market Participant to which this clause 3.8.3A applies may provide a ramp rate to AEMO that is less than that specified in clause 3.8.3A(b)(1) if the ramp rate is affected by an event or other occurrence that:

(1) physically prevents the relevant generating unit, scheduled load or scheduled network service from attaining a ramp rate of at least that specified in clause 3.8.3A(b)(1); or

(2) makes it unsafe for the relevant generating unit, scheduled load or scheduled network service to operate at a ramp rate of at least that specified in clause 3.8.3A(b)(1),

for the period of time in which the ramp rate is so affected by that event or other occurrence.

(d) If a Scheduled Generator, Semi-Scheduled Generator or Market Participant to which this clause 3.8.3A applies provides a ramp rate that is less than that specified in clause 3.8.3A(b)(1), it must provide a ramp rate to AEMO that is the maximum the relevant generating unit, scheduled load or scheduled network service can safely attain at that time.
Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(e) If a Scheduled Generator, Semi-Scheduled Generator or Market Participant to which this clause 3.8.3A applies provides a ramp rate that is less than that specified in clause 3.8.3A(b)(1), it must simultaneously provide AEMO with a brief, verifiable and specific reason why the ramp rate is below that specified in clause 3.8.3A(b)(1).

(f) The AER may require, upon written request, the Scheduled Generator, Semi-Scheduled Generator or Market Participant to provide such additional information as it may require from time to time to substantiate and verify the reason provided in clause 3.8.3A(e).

(g) The AER must exercise its powers under clause 3.8.3A(f) in accordance with any guidelines issued by the AER from time to time in accordance with the Rules consultation procedures.

(h) If a Scheduled Generator, Semi-Scheduled Generator or Market Participant to which this clause 3.8.3A applies provides a maximum ramp rate in accordance with clause 3.13.3(b) of less than that specified in clause 3.8.3A(b)(1), it must provide AEMO with a brief, verifiable and specific reason why the ramp rate is below that specified in clause 3.8.3A(b)(1).

(i) Clauses 3.8.3A(b), 3.8.3A(c) and 3.8.3A(e) do not apply to a Scheduled Generator, Semi-Scheduled Generator or Market Participant to which this clause 3.8.3A applies if:

1. it has provided a maximum ramp rate in accordance with clause 3.13.3(b) which is less than that specified in clause 3.8.3A(b)(1); and
2. it has notified AEMO of this in accordance with clause 3.8.3A(h).

(j) In addition to the obligations in clause 3.8.3A(d), if clause 3.8.3A(i) applies, the Scheduled Generator, Semi-Scheduled Generator or Market Participant must only provide ramp rates that are, at most, the maximum ramp rate for the relevant generating unit, scheduled load or scheduled network service in accordance with clause 3.13.3(b).

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

3.8.4 Notification of scheduled capacity
All Scheduled Generators and Market Participants with scheduled generating units, scheduled network services and/or scheduled loads must inform AEMO of their available capacity as follows in accordance with the timetable:

(a) Scheduled Generators and Market Participants must notify AEMO of the available capacity of each scheduled generating unit, scheduled network service and/or scheduled load for each trading interval of the trading day;
(b) subsequent changes may only be made to the information provided under clause 3.8.4(c), (d) and (e) in accordance with clause 3.8.22;

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(c) for Scheduled Generators, two days ahead of each trading day:

(1) a MW capacity profile that specifies the MW available for each of the 48 trading intervals in the trading day;
(2) estimated commitment or decommitment times;
(3) daily energy availability for energy constrained generating units; and
(4) an up ramp rate and a down ramp rate;

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(d) for scheduled loads, two days ahead of each trading day:

(1) a MW capacity profile that specifies the MW available for dispatch for each of the 48 trading intervals in the trading day;
(2) daily energy availability for energy constrained scheduled load; and
(3) an up ramp rate and a down ramp rate;

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(e) for scheduled network services, two days ahead of each trading day:

(1) a MW capacity profile that specifies the power transfer capability in each direction available for each of the 48 trading intervals in the trading day; and
(2) an up ramp rate and a down ramp rate.

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)
3.8.5 Submission timing

(a) To be valid for inclusion in the central dispatch process, a dispatch bid or dispatch offer or market ancillary service offer must be submitted according to the timetable.

(b) Subject to clause 3.8.22, changes to the:
   (1) MW quantities in the dispatch bids;
   (2) MW quantities and off-loading prices in the generation dispatch offers; and
   (3) MW quantities in the network dispatch offers,
   may be made after the relevant deadline in the timetable.

(c) The submission of dispatch bids, dispatch offers and market ancillary service offers to AEMO must be made using the electronic communication system unless otherwise approved by AEMO.

3.8.6 Generating unit offers for dispatch

Scheduled Generator

(a) A Scheduled Generator's dispatch offer must:
   (1) contain its intended self-dispatch level for each trading interval, and may contain up to 10 price bands which may be for:
      (i) possible dispatch above the intended self-dispatch level; or
      (ii) possible off-loading below the intended self-dispatch level, by dispatch instruction;
   (2) specify for each of the 48 trading intervals in the trading day:
      (i) a MW capacity for the intended self-dispatch level;
      (ii) an incremental MW amount for each price band specified in the dispatch offer; and
      (iii) an up ramp rate and a down ramp rate;
   (3) where the offer specifies a self-dispatch level of more than zero, specify at least one price band for off-loading below the intended self-dispatch level and the total MW quantity in price bands specified for off-loading in each trading interval must equal the MW quantity of the self-dispatch level for that trading interval to enable possible off-loading to a zero dispatch level; and
   (4) specify a loading price or an off-loading price for each price band specified in the dispatch offer, in dollars and whole cents per MWh, and this price is to apply to the price band throughout the trading day.

(b) A Scheduled Generator's dispatch offer may specify the daily energy available for energy constrained scheduled generating units.
(c) A Scheduled Generator's loading prices offered must be equal to or greater than $0/MWh and may not exceed the product of the market price cap multiplied by the relevant intra-regional loss factor at the Scheduled Generator's transmission network connection point for the scheduled generating unit.

(d) A loading price of a Scheduled Generator specified for a price band is to be interpreted as the minimum price at which up to the specified MW increment is to be loaded in the central dispatch process.

(e) A Scheduled Generator's off-loading prices must be less than $0/MWh, that is, negative in sign and may not be less than the product of the market floor price multiplied by the relevant intra-regional loss factor at the Scheduled Generator's transmission network connection point for the scheduled generating unit.

(f) An off-loading price of a Scheduled Generator specified for a price band is to be interpreted as the maximum price payable to AEMO by the Scheduled Generator in respect of the generating unit's sent out generation with the generating unit's output reduced below its specified self-dispatch level in the central dispatch process by an amount less than the specified MW increment.

Semi-Scheduled Generator

(g) A Semi-Scheduled Generator's dispatch offer may contain up to 10 price bands and must specify for each of the 48 trading intervals in the trading day:

(1) an incremental MW amount for each price band specified in the dispatch offer; and

(2) an up ramp rate and a down ramp rate.

Semi-Scheduled and Scheduled Generators

(h) A dispatch offer of a Semi-Scheduled Generator or Scheduled Generator must meet the following requirements:

(1) the MW quantities specified are to apply at the terminals of the semi-scheduled generating unit or scheduled generating unit or, with AEMO's agreement, at any other point in the relevant Generator's electrical installation or on the network;

(2) prices specified for each price band specified in the dispatch offer must increase monotonically with an increase in available MWs;

(3) prices specified are to apply at the connection point of the semi-scheduled generating unit or the scheduled generating unit (as the case may be) and for the purposes of central dispatch shall be referred to the regional reference node to which that connection point is assigned as follows:

\[ RP = \frac{DOP}{LF} \]

where
RP is the price specified in the *dispatch offer* when referred to the appropriate *regional reference node* and must not be greater than the *market price cap* or less than the *market floor price*;

DOP is the price as specified in the *dispatch offer*; and

LF where the connection point:

(i) is a *transmission network connection point*, is the relevant *intra-regional loss factor* at that connection point; or

(ii) is a *distribution network connection point*, is the product of the *distribution loss factor* at that connection point multiplied by the relevant *intra-regional loss factor* at the *transmission network connection point* to which it is assigned; and

(4) the MW quantity specified in each *price band* in each *trading interval* must be specified in whole MW.

**Note**

Where two *intra-regional loss factors* are determined for a *transmission network connection point* under clause 3.6.2(b)(2), AEMO will determine the relevant *intra-regional loss factor* for use under this clause in accordance with the procedure determined under clause 3.6.2(d1).

### 3.8.6A Scheduled network service offers for dispatch

The following requirements apply to a *network dispatch offer* to provide *scheduled network services*:

(a) the *network dispatch offer* may contain up to a maximum of ten *price bands* for each direction of power flow for the *scheduled network service*;

(b) the *network dispatch offer* must specify for each of the 48 *trading intervals* in the *trading day*:

(1) an incremental power delivery range for each *price band* specified in the *network dispatch offer*; and

(2) an up *ramp rate* and a down *ramp rate*;

(c) the *network dispatch offer* must specify a price for each *price band* in dollars and whole cents per MWh and this price is to apply to the *price band* throughout the *trading day*;

(d) within the set of *price bands* applying to a particular direction of power flow, prices specified for each *price band* specified in the *network dispatch offer* must increase monotonically with an increase in available MWs;

(e) if negative prices are employed, the absolute value of the most negative price in one direction cannot exceed the price for the first *price band* in the opposite direction, after adjustment for losses;

(f) the price specified in a *price band* for power transfer from the *scheduled network service's connection point* A to connection point B is to be interpreted in the central dispatch process as meaning that the *Scheduled Network Service Provider* is willing to deliver an increment of power to connection point B, within the power delivery range of the power band, provided that the net
revenue which is expected to be derived from that increment per MWh delivered to connection point B is not less than the specified price;

(g) for the purposes of this clause 3.8.6A, the net revenue that a Scheduled Network Service Provider expects to receive for energy delivered by the scheduled network service to connection point B is to be determined as follows:

\[ \text{net revenue} = PB \times FB - PA \times FA \]

where

PA and PB are the prices at the scheduled network service's connection points A and B, which are assumed not to change as a result of the incremental transfer;

FA and FB are the energy transfers scheduled by central dispatch for receipt by the scheduled network service at connection point A and delivery at connection point B respectively; and

FA and FB are deemed to be related by the loss vs flow relationship published by AEMO;

(h) for the purposes of this clause 3.8.6A, the price at a connection point will be deemed to be related as follows to the price at the regional reference node to which that connection point is assigned:

\[ P = RP \times LF \]

where

P is the price at the connection point;

RP is the price at the appropriate regional reference node; and

LF where the scheduled network service's connection point is a transmission network connection point, is the relevant intra-regional loss factor at that connection point, or where the scheduled network service's connection point is a distribution network connection point, is the product of the distribution loss factor at that connection point multiplied by the relevant intra-regional loss factor at the transmission network connection point to which it is assigned;

(i) prices specified in the network dispatch offer must not exceed the market price cap or be less than the market floor price; and

(j) the power delivery range specified in each price band in each trading interval must be specified in whole MW.

Note
Where two intra-regional loss factors are determined for a transmission network connection point under clause 3.6.2(b)(2), AEMO will determine the relevant intra-regional loss factor for use under this clause in accordance with the procedure determined under clause 3.6.2(d1).

3.8.7 Bids for scheduled load

The following requirements apply to a dispatch bid for scheduled loads:
(a) the dispatch bid must specify whether the scheduled load is to be considered as normally on or normally off;

(b) the dispatch bid may contain up to a maximum of ten price bands;

(c) the dispatch bid must specify for each of the 48 trading intervals in the trading day:

(1) an incremental MW amount for each price band specified in the dispatch bid; and

(2) an up ramp rate and a down ramp rate;

(d) the dispatch bid must specify a price for each price band in dollars and whole cents per MWh and this price is to apply to the price band throughout the trading day;

(e) prices specified for each price band specified in the dispatch bid must increase monotonically with an increase in available MWs;

(f) prices specified are to apply at the scheduled load's connection point and for the purposes of central dispatch shall be referred to the regional reference node to which that connection point is assigned as follows:

\[ RP = \frac{DOP}{LF} \]

where

RP is the price specified in the dispatch bid when referred to the appropriate regional reference node;

DOP is the price as specified in the dispatch bid; and

LF where the scheduled load's connection point is a transmission network connection point, is the relevant intra-regional loss factor at that connection point, or where the scheduled load's connection point is a distribution network connection point, is the product of the distribution loss factor at that connection point multiplied by the relevant intra-regional loss factor at the transmission network connection point to which it is assigned;

(g) MW quantities specified for a price band are to apply at the scheduled load's connection point or at any other point in the Market Participant's electrical installation or on the network as agreed to by AEMO;

(h) prices specified must be:

(1) more than the product of the market floor price multiplied by the relevant intra-regional loss factor at the scheduled load's transmission network connection point; and

(2) less than the product of the market price cap multiplied by the relevant intra-regional loss factor at the scheduled load's transmission network connection point;

(i) for a scheduled load specified in the dispatch bid as being normally on, the price specified for a price band is to be interpreted in the central dispatch
process as the price at or above which the scheduled load will reduce electricity consumed by up to the MW increment specified in that price band;

(j) for a scheduled load specified in the dispatch bid as being normally off, the price specified for a price band is to be interpreted in the central dispatch process as the price at or below which the scheduled load will increase electricity consumed by up to the MW increment specified in that price band;

(k) the MW capacity quantity specified in each price band in each trading interval must be specified in whole MW;

(l) the sum of the MW quantities specified in each price band in any trading interval must not exceed the maximum capacity of the scheduled load; and

(m) the dispatch bid may specify the daily energy available for energy constrained scheduled loads.

Note
Where two intra-regional loss factors are determined for a transmission network connection point under clause 3.6.2(b)(2), AEMO will determine the relevant intra-regional loss factor for use under this clause in accordance with the procedure determined under clause 3.6.2(d1).

3.8.7A Market ancillary services offers
The following requirements apply to all market ancillary service offers for each type of market ancillary service:

(a) the market ancillary service offer may contain up to 10 price bands;

(b) the market ancillary service offer must specify for each of the 48 trading intervals in the trading day an incremental MW amount for each price band specified in the market ancillary service offer;

(c) the MW quantities specified are to apply at the nominated connection point or, with AEMO’s agreement, at any other point in the relevant electrical installation or on the network;

(d) the ancillary service offer must specify a price for each price band specified in the market ancillary service offer, in dollars and whole cents per MW per hour (an enabling price), and this price is to apply to the price band throughout the trading day;

(e) enabling prices for each price band specified in the market ancillary service offer must increase monotonically with an increase in available MWs;

(f) enabling prices are to apply at the nominated connection point or, with AEMO’s agreement, at any other point in the relevant electrical installation or on the network;

(g) enabling prices offered must be equal to or greater than $0 per MW per hour and may not exceed the market price cap;

(h) the enabling price for a price band is to be interpreted as the minimum price at which up to the specified MW response is to be enabled in the central dispatch process;
(i) the MW quantity in each price band in each trading interval must be specified in whole MW;

(j) the market ancillary service offer must include the following values:
   (1) the response breakpoint;
   (2) the upper and lower enablement limits; and
   (3) the response capability;

(k) an Ancillary Service Provider that submits a market ancillary service offer must ensure that the ancillary service generating unit or ancillary service load, as the case may be, is at all times capable of responding in the manner contemplated by the market ancillary service specification;

(l) the values associated with a market ancillary service offer referred to in clause 3.8.7A(j) must represent technical characteristics of the ancillary service generating unit or ancillary service load; and

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(m) rebids made under clause 3.8.22 of the values associated with the market ancillary service offer referred to in clause 3.8.7A(j) must represent technical characteristics at the time of dispatch of the ancillary service generating unit or ancillary service load.

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

3.8.8 Validation of dispatch bids and offers

(a) If a dispatch offer, dispatch bid or market ancillary service offer is made in accordance with clauses 3.8.6, 3.8.6A, 3.8.7 or 3.8.7A (whichever is applicable), AEMO must make available to the Scheduled Generator, Semi-Scheduled Generator or Market Participant who submitted the dispatch offer, dispatch bid or market ancillary service offer the following information without delay:
   (1) acknowledgement of receipt of a valid dispatch offer, dispatch bid or market ancillary service offer; and
   (2) the data contained in the dispatch offer, dispatch bid or market ancillary service offer as it will be used by AEMO in the central dispatch process.

(b) It is the responsibility of each Scheduled Generator, Semi-Scheduled Generator and Market Participant to check that the data contained in its dispatch offer, dispatch bid or market ancillary service offer as received and to be used by AEMO in the central dispatch process is correct.
Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(c) If a dispatch offer, dispatch bid or market ancillary service offer is not made in accordance with clauses 3.8.6, 3.8.6A, 3.8.7 or 3.8.7A (whichever is applicable), AEMO must not include that dispatch offer, dispatch bid or market ancillary service offer in the central dispatch process and must without delay notify the Scheduled Generator, Semi-Scheduled Generator or Market Participant submitting the dispatch offer, dispatch bid or market ancillary service offer of its invalidity and provide to that Scheduled Generator, Semi-Scheduled Generator or Market Participant details of the invalid data.

(d) If any details contained within a dispatch offer, dispatch bid or market ancillary service offer are inconsistent with the bid and offer validation data provided by the relevant Scheduled Generator, Semi-Scheduled Generator or Market Participant then AEMO has the right to treat that dispatch offer, dispatch bid or market ancillary service offer as invalid and if it does so must notify the Scheduled Generator, Semi-Scheduled Generator or Market Participant without delay.

3.8.9 Default offers and bids

(a) A Scheduled Generator, Semi-Scheduled Generator or Market Participant may, at any time, submit a dispatch offer, a dispatch bid or a market ancillary service offer in respect of a scheduled generating unit, semi-scheduled generating unit, scheduled load, scheduled network service, ancillary service generating unit or ancillary service load to apply from a specified future trading day.

(b) A Scheduled Generator, Semi-Scheduled Generator or Market Participant may vary or withdraw a default dispatch bid, default dispatch offer or market ancillary service offer at any time prior to the deadline for submissions of dispatch offers, dispatch bids and market ancillary service offers for a trading day in accordance with the timetable.

(c) Subject to any procedures published in accordance with clause 3.8.9(d), default dispatch offer, default dispatch bid or market ancillary service offer applicable to a trading day must be included by AEMO in the central dispatch process when the deadline for submission of dispatch offers, dispatch bids and market ancillary service offers for that trading day arrives in accordance with the timetable if, and only if, no later valid dispatch offer, dispatch bid or market ancillary service offer has been submitted pursuant to clauses 3.8.6, 3.8.6A, 3.8.7, 3.8.7A or 3.8.9(b).

(d) AEMO, in consultation with Scheduled Generators, Semi-Scheduled Generators and Market Participants in accordance with the Rules consultation procedures, must develop and publish procedures to determine the circumstances when AEMO may use a prior dispatch offer or dispatch bid lodged by a Scheduled Generator, Semi-Scheduled Generator or Market Participant as a substitute for a default dispatch offer or default dispatch bid.
AEMO may disregard a default dispatch offer or a default dispatch bid and substitute a prior dispatch offer or dispatch bid or market ancillary service offer lodged by a Scheduled Generator, Semi-Scheduled Generator or a Market Participant determined in accordance with a procedure developed under clause 3.8.9(d) as input to PASA, pre-dispatch and central dispatch.

### 3.8.10 Network constraints

(a) In accordance with the AEMO power system security responsibilities and any other standards set out in Chapter 4, AEMO must determine any constraints on the dispatch of scheduled generating units, semi-scheduled generating units, scheduled network services, scheduled loads, ancillary service generating units or ancillary service loads which may result from planned network outages.

(b) Subject to paragraph (e), AEMO must determine and represent network constraints in dispatch which may result from limitations on intra-regional or inter-regional power flows and, in doing so, must use a fully co-optimised network constraint formulation.

(c) AEMO must, in accordance with the Rules consultation procedures, develop and publish by 1 June 2010, and, where necessary, amend network constraint formulation guidelines, to address, amongst other things, the following matters:

1. the circumstances in which AEMO will use alternative network constraint formulations in dispatch;

2. the process by which AEMO will identify or be advised of a requirement to create or modify a network constraint equation, including in respect of:
   
   (i) the methodology to be used by AEMO in determining network constraint equation terms and co-efficients; and

   (ii) the means by which AEMO will obtain information from, and disseminate information to, Scheduled Generators, Semi-Scheduled Generators and Market Participants;

3. the methodology to be used by AEMO in selecting the form of a network constraint equation including in respect of the location of terms on each side of the equation;

4. the process to be used by AEMO for applying, invoking and revoking network constraint equations in relation to different types of network constraints, including in respect of:

   (i) the circumstances in which AEMO will use alternative network constraint formulations and fully co-optimised network constraint formulations; and

   (ii) the dissemination of information to Scheduled Generators, Semi-Scheduled Generators and Market Participants in respect of this process; and
(5) *AEMO’s* policy in respect of the management of negative *settlements residue*, by intervening in the *central dispatch* process under clause 3.8.1 through the use of *fully co-optimised network constraint formulations*, including in respect of the process to be undertaken by *AEMO* to manage negative *settlements residue*.

(d) *AEMO* must at all times comply with the *network constraint* formulation guidelines issued in accordance with paragraph (c).

(e) Where, in *AEMO’s* reasonable opinion, a specific *network constraint* is such that use of a *fully co-optimised network constraint formulation* is not appropriate, *AEMO* may apply an *alternative network constraint formulation* for the expected duration of that *network constraint*, if *AEMO*:

1. has previously identified, in guidelines issued in accordance with paragraph (c), that it may use an *alternative network constraint formulation* in respect of that type of *network constraint*; and
2. reasonably considers that it can apply an *alternative network constraint formulation* without prejudicing its obligation to operate a *central dispatch* process to dispatch scheduled generating units, semi-scheduled generating units, scheduled loads, scheduled network services and market ancillary services in order to balance *power system supply* and *power system demand*, consistent with using its reasonable endeavours to maintain *power system security* in accordance with Chapter 4 of the *Rules* and to maximise the value of *spot market* trading on the basis of *dispatch offers* and *dispatch bids*, in accordance with clause 3.8.1(a) and (b).

(f) *AEMO* must represent *network constraints* as inputs to the *dispatch* process in a form that can be reviewed after the *trading interval* in which they occurred.

(g) [Deleted]

### 3.8.11 Ancillary services constraints

(a) *AEMO* must determine the quantity and nature of *ancillary services* which:

1. have been provided or procured in accordance with the *AEMO power system security responsibilities* set out in clause 4.3.1 or are otherwise available;
2. are required to be managed in conjunction with *dispatch*; and
3. may impose constraints on *central dispatch*.

(a1) For each *dispatch interval* *AEMO* must impose constraints upon the *dispatch algorithm* to determine the quantity of each *global market ancillary service requirement* and any *local market ancillary service requirements*.

### 3.8.12 System scheduled reserve constraints

*AEMO* must use its reasonable endeavours to ensure that the *dispatch* process meets all requirements for *scheduled reserves* as described in Chapter 4.
3.8.13 Notification of constraints

*AE*MO must *publish* the parameters used in the *dispatch algorithm* for the modelling of *network constraints, regulating capability constraints, power system reserve constraints* and *ancillary services*.

3.8.14 Dispatch under conditions of supply scarcity

During times of supply scarcity, *AE*MO must use its reasonable endeavours to ensure that the actions set out below occur in the following sequence:

(a) subject to:

   (1) any adjustments which may be necessary to implement action under paragraph (c); and

   (2) any *plant* operating restrictions associated with a *relevant AEMO intervention event*,

all valid *dispatch bids* and *dispatch offers* submitted by *Scheduled Generators, Semi-Scheduled Generators or Market Participants* are dispatched, including those priced at the *market price cap*;

(b) subject to:

   (1) any adjustments which may be necessary to implement action under paragraph (c); and

   (2) any *plant* operating restrictions associated with a *relevant AEMO intervention event*,

after all valid *dispatch bids* and *dispatch offers* referred to in paragraph (a) have been exhausted, exercise the *reliability and emergency reserve trader* in accordance with rule 3.20 by:

   (3) dispatching *scheduled generating units, scheduled network services* or *scheduled loads* in accordance with any *scheduled reserve contract*; or

   (4) activating *loads* or *generating units* under any *unscheduled reserve contract*; and

(c) any further corrective actions required are implemented in accordance with clauses 4.8.5B and 4.8.9.

3.8.15 [Deleted]

3.8.16 Equal priced dispatch bids and dispatch offers

If there are *scheduled generating units, semi-scheduled generating units* or *scheduled loads*, in the same *region*, for which the prices submitted in *dispatch bids* or *dispatch offers* for a particular *trading interval* result in identical prices at their *regional reference node*, then the MW quantities specified in the relevant *price bands* of those *dispatch bids* or *dispatch offers* must be *dispatched* on a pro-rata basis, where this can be achieved without imposing undue costs on any party, or violating other constraints.
3.8.17 Self-commitment

(a) Slow start generating units are generating units which are unable to synchronise and increase generation within 30 minutes of receiving an instruction from AEMO.

(b) Slow start generating units must self-commit to be eligible for dispatch.

(c) A Generator may only self-commit a scheduled generating unit in accordance with this clause.

(d) A Scheduled Generator or a Semi-Scheduled Generator has a right to synchronise its scheduled generating unit or semi-scheduled generating unit (as the case may be) to the power system and have AEMO dispatch that generating unit subject to the dispatch procedures set out in this rule 3.8.

(e) A Scheduled Generator must advise AEMO of its intention to self-commit and synchronise a scheduled generating unit with a nameplate rating of 30MW or more.

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(f) Unless otherwise agreed with AEMO, the Scheduled Generator must advise of its intention under paragraph (e) through PASA and pre-dispatch by submitting an amended available capacity profile of the scheduled generating unit into the market information bulletin board.

(g) The exact time of synchronisation for a scheduled generating unit will be subject to directions from AEMO in accordance with Chapter 4.

(h) A Scheduled Generator or Market Participant must notify AEMO of any changes to self-commitment decisions without delay.

(i) AEMO must notify all Scheduled Generators and Market Participants of any changes to self-commitment decisions without delay.

3.8.18 Self-decommitment

(a) A Generator may only self-decommit a scheduled generating unit in accordance with this clause.

(b) Scheduled Generators must notify AEMO of their planned self-decommitment decisions in relation to slow start generating units at least 2 days in advance of dispatch.

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(c) A Scheduled Generator must advise AEMO of its intention to self-decommit and de-synchronise a generating unit with a nameplate rating of 30 MW or more.
Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(d) Unless otherwise agreed with AEMO, the Scheduled Generator must advise of its intention under paragraph (c) through PASA and pre-dispatch by submitting an amended available capacity profile of the scheduled generating unit into the market information bulletin board.

(e) A Scheduled Generator or Market Participant must notify AEMO as soon as practicable of any changes in their self-decommitment decisions.

(f) AEMO must notify all Scheduled Generators and Market Participants of any changes to self-decommitment decisions as soon as practicable.

3.8.19 Dispatch inflexibilities

(a) Subject to clause 3.8.19(a2), if a Scheduled Generator or Market Participant reasonably expects one or more of its scheduled generating units, scheduled network services or scheduled loads to be unable to operate in accordance with dispatch instructions in any trading interval, due to abnormal plant conditions or other abnormal operating requirements in respect of that scheduled generating unit, scheduled network service or scheduled load, it must advise AEMO through the PASA process or in its dispatch offer or dispatch bid in respect of that scheduled generating unit, scheduled network service or scheduled load, as appropriate under this Chapter, that the scheduled generating unit, scheduled network service or scheduled load is inflexible in that trading interval and must specify a fixed loading level at which the scheduled generating unit, scheduled network service or scheduled load is to be operated in that trading interval.

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(a1) Subject to clause 3.8.19(a2), if a Semi-Scheduled Generator reasonably expects one or more of its semi-scheduled generating units to be unable to operate in accordance with dispatch instructions in any trading interval due to abnormal plant conditions or other abnormal operating requirements in respect of that semi-scheduled generating unit, it must advise AEMO in its dispatch offer in respect of that semi-scheduled generating unit, as appropriate under this Chapter, that the semi-scheduled generating unit is inflexible in that trading interval and must specify a maximum loading level at or below which the semi-scheduled generating unit is to be operated in that trading interval. Where the specified maximum loading level in these circumstances exceeds the unconstrained intermittent generation forecast for the semi-scheduled generating unit, the dispatch level for the semi-scheduled generating unit will nonetheless not exceed the unconstrained intermittent generation forecast.
Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(a2) If clause 3.8.19(a) or clause 3.8.19(a1) applies, the Scheduled Generator, Market Participant or Semi-Scheduled Generator:

(1) must not advise AEMO that a scheduled generating unit, semi-scheduled generating unit, scheduled network service or scheduled load is inflexible under clause 3.8.19(a) or clause 3.8.19(a1) unless it reasonably expects the scheduled generating unit, semi-scheduled generating unit, scheduled network service or scheduled load to be unable to operate in accordance with dispatch instructions in any trading interval, due to abnormal plant conditions or other abnormal operating requirements in respect of that scheduled generating unit, semi-scheduled generating unit, scheduled network service or scheduled load; and

(2) must, as soon as practicable, advise AEMO that a scheduled generating unit, semi-scheduled generating unit, scheduled network service or scheduled load is not inflexible once it no longer reasonably expects the scheduled generating unit, semi-scheduled generating unit, scheduled network service or scheduled load to be unable to operate in accordance with dispatch instructions in any trading interval, due to abnormal plant conditions or other abnormal operating requirements in respect of that scheduled generating unit, semi-scheduled generating unit, scheduled network service or scheduled load.

(b) Where a Scheduled Generator, Semi-Scheduled Generator or Market Participant advises AEMO that a scheduled generating unit, semi-scheduled generating unit, scheduled network service or scheduled load is inflexible in accordance with clause 3.8.19(a) or 3.8.19(a1) the Scheduled Generator, Semi-Scheduled Generator or Market Participant must:

(1) provide AEMO with a brief, verifiable and specific reason why the scheduled generating unit, semi-scheduled generating unit, scheduled network service or scheduled load is inflexible at the same time as it advises AEMO of the inflexibility; and

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(2) provide to the AER, upon written request, in accordance with the guidelines issued by the AER from time to time in accordance with the Rules consultation procedures such additional information to substantiate and verify the reason for such inflexibility as the AER may require from time to time. The AER must provide information provided to it in accordance with this clause 3.8.19(b)(2) to any Market Participant that requests such information, except to the extent that the information can be reasonably claimed to be confidential information.
(c) Other than in trading intervals for which it has been specified by a Scheduled Generator, Semi-Scheduled Generator or Market Participant in the relevant dispatch offer or dispatch bid for a scheduled generating unit, semi-scheduled generating unit, scheduled network service or scheduled load that the scheduled generating unit, semi-scheduled generating unit, scheduled network service or scheduled load is inflexible, AEMO will dispatch the scheduled generating unit, semi-scheduled generating unit, scheduled network service or scheduled load in accordance with the prices and price bands specified in the relevant dispatch offer or dispatch bid.

(d) In respect of scheduled loads, scheduled generating units or semi-scheduled generating units which are not slow start generating units, Scheduled Generators, Semi-Scheduled Generators and Market Participants may provide AEMO, as part of a dispatch offer or dispatch bid in respect of those scheduled loads or generating units or semi-scheduled generating units, with a dispatch inflexibility profile.

(c) A dispatch inflexibility profile for a generating unit must contain the following parameters to indicate its MW capacity and time related inflexibilities:

(1) The time, T1, in minutes, following the issue of a dispatch instruction by AEMO to increase its loading level from 0 MW, which is required for the plant to begin to vary its dispatch level from 0 MW in accordance with the instruction;

(2) The time, T2, in minutes, that the plant requires after T1 (as specified in subparagraph (1)) to reach a specified minimum MW loading level;

(3) The time, T3, in minutes, that the plant requires to be operated at or above its minimum loading level before it can be reduced below that level;

(4) The time, T4, in minutes, following the issue of a dispatch instruction by AEMO to reduce loading level from the minimum loading level (specified under subparagraph (2)) to zero, that the plant requires to completely comply with that instruction;

(5) T1, T2, T3 and T4 must all be equal to or greater than zero;

(6) The sum (T1 + T2) must be less than or equal to 30 minutes; and

(7) The sum (T1 + T2 + T3 + T4) must be less than 60 minutes.

(f) A dispatch inflexibility profile for a scheduled load must contain parameters to indicate its MW capacity and time related inflexibilities.

(g) AEMO must use reasonable endeavours not to issue a dispatch instruction which is inconsistent with a Scheduled Generator's, Semi-Scheduled Generator's or Market Participant's dispatch inflexibility profile.

3.8.20 Pre-dispatch schedule

(a) Each day, in accordance with the timetable, AEMO must prepare and publish a pre-dispatch schedule covering each trading interval of the period commencing from the next trading interval after the current trading interval
up to and including the final trading interval of the last trading day for which all valid dispatch bids and dispatch offers have been received in accordance with the timetable and applied by the pre-dispatch process.

(b) The pre-dispatch process is to have a resolution of one trading interval and no analysis will be made of operations within the trading interval, other than to ensure that contingency capacity reserves are adequate as set out in Chapter 4.

(c) AEMO must determine the pre-dispatch schedule for each trading interval on the basis of:

1. dispatch bids, dispatch offers and market ancillary service offers submitted for that trading interval;
2. AEMO's forecast power system load for each region for that trading interval; and
3. the unconstrained intermittent generation forecasts,

and by using a process consistent with the principles for central dispatch as set out in clause 3.8.1.

(d) In determining the pre-dispatch schedule AEMO shall not take account of any dispatch inflexibility profile submitted in accordance with clause 3.8.19.

(e) Any inputs made to the pre-dispatch process by AEMO for the purpose of achieving a physically realisable schedule or to satisfy power system security requirements must be made prior to release of the pre-dispatch schedule and recorded by AEMO in a manner suitable for audit.

(f) The pre-dispatch schedule must include the details set out in clause 3.13.4(f).

(g) Each Scheduled Generator, Scheduled Network Service Provider and Market Customer which has classified a scheduled load and Market Participant (which has classified an ancillary service generating unit or ancillary service load) must ensure that it is able to dispatch the relevant plant as required under the pre-dispatch schedule and is responsible for changing inputs to the central dispatch process, if necessary to achieve this, via the rebidding provisions under clause 3.8.22.

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(h) The pre-dispatch schedule must be re-calculated and the results re-published by AEMO regularly in accordance with the timetable, or more often if a change in circumstances is deemed by AEMO to be likely to have a significant effect on the operation of the market.

(i) AEMO must fully document the operation of the pre-dispatch process, including the principles adopted in making calculations required to be included and all such documentation must be made available to Scheduled Generators, Semi-Scheduled Generators and Market Participants at a fee to be set by AEMO to cover its costs of supplying such documentation.
(j) The following pre-dispatch outputs relating specifically to a generating unit, scheduled network service, scheduled load or ancillary service load operated by a Scheduled Generator, Semi-Scheduled Generator or Market Participant (as the case may be) must be made available electronically to the relevant Generator or Market Participant on a confidential basis:

1. the scheduled times of commitment and de-commitment of individual slow start generating units;
2. scheduled half hourly loading level for each scheduled entity;
3. scheduled provision of ancillary services;
4. scheduled constraints for the provision of ancillary services;
5. scheduled constraints due to network limitations;
6. unconstrained intermittent generation forecasts for each trading interval; and
7. for each semi-scheduled generating unit and trading interval, whether or not a condition for setting a semi-dispatch interval applies.

(k) Where the pre-dispatch schedule may have failed to dispatch a scheduled generating unit or a semi-scheduled generating unit to maximise the joint value of energy and ancillary services pre-dispatch outputs of a scheduled generating unit or semi-scheduled generating unit, due to the generating unit operating outside its enablement limit, AEMO must notify the Scheduled Generator or Semi-Scheduled Generator operating the relevant generating unit electronically on a confidential basis.

3.8.21 On-line dispatch process

(a) Dispatch bids and dispatch offers must be centrally dispatched by AEMO using the dispatch algorithm.

(a1) A dispatch interval is to be five minutes in duration.

(b) The dispatch algorithm is to be run by AEMO for each dispatch interval. If the dispatch algorithm is not successfully run for any dispatch interval then the values of the last successful run of the dispatch algorithm must be used for that dispatch interval.

(c) Central dispatch results in the setting of dispatch prices and ancillary services prices for each dispatch interval and spot prices for each trading interval in accordance with rule 3.9.

(d) Where possible, dispatch instructions will be issued electronically via the automatic generation control system or via an electronic display in the plant control room (which may be onsite or offsite) of the Scheduled Generator, Semi-Scheduled Generator or Market Participant (as the case may be).

(e) AEMO may issue dispatch instructions in some other form if in its reasonable opinion the methods described in paragraph (d) are not possible.
(f) A Scheduled Generator, Semi-Scheduled Generator or Market Participant must ensure it has facilities to receive dispatch instructions in the manner described in this clause 3.8.21.

(g) Dispatch instructions that are issued via the automatic generation control system are to be issued progressively at intervals of no more than 5 minutes following re-evaluation of central dispatch to achieve a prompt and smooth implementation of the outcomes of each central dispatch update.

(h) With the exception of instructions issued by telephone, all dispatch instructions and the times at which they are issued are to be logged automatically and dispatch instructions that are issued by telephone must be recorded by AEMO.

(i) AEMO may modify or override the dispatch algorithm outcome in accordance with the requirements of clause 4.8.9 or due to plant not conforming to dispatch instructions and in such circumstances AEMO must record the details of the event and the reasons for its action for audit purposes.

(j) If a scheduled load, scheduled generating unit or semi-scheduled generating unit, in respect of which a dispatch inflexibility profile has been notified to AEMO in accordance with clause 3.8.19, is dispatched from 0 MW in any dispatch interval by the central dispatch process, then the specified dispatch inflexibility profile must be used by AEMO as a constraint on the dispatch of that plant for the relevant subsequent dispatch intervals.

(k) A scheduled load or generating unit whose dispatch is constrained in any dispatch interval due to a dispatch inflexibility profile submitted under clause 3.8.19 cannot be used as the basis for setting the dispatch price in that dispatch interval at any location.

(l) AEMO must fully document the operation of the process described in this clause 3.8.21, including the software, algorithms, and the principles adopted in making judgments where they are required in the process and all such documentation must be made available to Scheduled Generators, Semi-Scheduled Generators and Market Participants at a price reflective of costs incurred by AEMO in providing such documentation.

(m) Where the central dispatch process may have failed to dispatch a scheduled generating unit or semi-scheduled generating unit to maximise the joint value of energy and ancillary services due to the relevant generating unit operating outside its enablement limit, AEMO must notify the Scheduled Generator or Semi-Scheduled Generator operating the relevant generating unit electronically on a confidential basis.

### 3.8.22 Re bidding

(a) Prices for each price band that are specified in dispatch bids, dispatch offers and market ancillary service offers are firm and no changes to the price for any price band are to be accepted under any circumstances.

(b) Subject to clauses 3.8.3A, 3.8.7A, 3.8.19(a) and 3.8.22A, a Scheduled Generator, Semi-Scheduled Generator or Market Participant may submit a rebid to vary:
(1) its available capacity, daily energy constraints, dispatch inflexibilities and ramp rates of generating units, scheduled network services and scheduled loads; and

(2) the response breakpoints, enablement limits and response limits of market ancillary services,

previously notified in a dispatch offer, a dispatch bid or a previous rebid.

(c) A Scheduled Generator, Semi-Scheduled Generator or Market Participant must provide:

(1) all rebids to AEMO electronically unless otherwise approved by AEMO;

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(2) to AEMO, at the same time as the rebid is made:

(i) a brief, verifiable and specific reason for the rebid; and

(ii) the time at which the event(s) or other occurrence(s) adduced by the relevant Generator or Market Participant as the reason for the rebid, occurred;

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

Clause 3.8.22(c)(2) applies in respect of any rebid submitted during the late rebidding period.

(3) to the AER, upon written request, in accordance with guidelines published by the AER, such additional information to substantiate and verify the reason for a rebid (including any record made under paragraph (ca)) as the AER may require from time to time.

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(ca) A Scheduled Generator, Semi-Scheduled Generator or Market Participant who makes a rebid during the late rebidding period must make a contemporaneous record in relation to the rebid, which must include a record of:

(i) the material conditions and circumstances giving rise to the rebid;

(ii) the Generator's or Market Participant's reasons for making the rebid;

(iii) the time at which the relevant event(s) or other occurrence(s) occurred; and
(iv) the time at which the Generator or Market Participant first became aware of the relevant event(s) or other occurrence(s).

Notes

Clause 1.9 applies to records made under paragraph (ca).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(d) The AER must provide information provided to it in accordance with paragraph (c)(3) to any Scheduled Generator, Semi-Scheduled Generator or Market Participant that requests such information, except to the extent that the information can be reasonably claimed to be confidential information.

(e) The guidelines referred to in paragraphs (c)(3) must be developed in accordance with the Rules consultation procedures and must include:

(1) the amount of detail to be included in the information provided to AEMO under paragraph (c)(2); and

(2) procedures for handling claims by Scheduled Generators, Semi-Scheduled Generators or Market Participants in accordance with paragraph (d) or clause 3.8.19(b)(2) that the information provided to the AER by such Generators or Market Participants under those clauses is confidential information.

(f) The AER must publish the guidelines developed under this clause 3.8.22 and may amend such guidelines from time to time.

(g) AEMO must:

(1) subject to the Scheduled Generator, Semi-Scheduled Generator or Market Participant complying with paragraphs (c)(1) and (c)(2)(i) and (ii), accept the rebid; and

(2) publish, in accordance with clause 3.13.4(p), the time the rebid was made and the reason provided by the Scheduled Generator, Semi-Scheduled Generator or Market Participant under paragraph (c)(2)(i).

3.8.22A Offers, bids and rebids must not be false or misleading

(a) A Scheduled Generator, Semi-Scheduled Generator or Market Participant must not make a dispatch offer, dispatch bid or rebid that is false, misleading or likely to mislead.

(a1) For the purposes of paragraph (a), the making of a dispatch offer, dispatch bid or rebid is deemed to represent to other Generators or Market Participants through the pre-dispatch schedules published by AEMO that the offer, bid or rebid will not be changed, unless the Generator or Market Participant becomes aware of a change in the material conditions and circumstances upon which the offer, bid or rebid are based.

(b) Without limiting paragraph (a), a dispatch offer, dispatch bid or rebid is deemed to be false or misleading if, at the time of making such an offer, bid
or rebid, a Scheduled Generator, Semi-Scheduled Generator or Market Participant:

(1) does not have a genuine intention to honour; or

(2) does not have a reasonable basis to make;

the representations made by reason of paragraph (a1).

(b1) In any proceeding in which a contravention of paragraph (a) is alleged, in determining whether a Scheduled Generator, Semi-Scheduled Generator or Market Participant made a dispatch offer, dispatch bid or rebid that was false, misleading or likely to mislead, a court must have regard to the market design principle set out in clause 3.1.4(a)(2).

(c) A Scheduled Generator, Semi-Scheduled Generator or Market Participant may be taken to have contravened paragraph (a) notwithstanding that, after all the evidence has been considered, the false or misleading character of the dispatch offer, dispatch bid or rebid (including either of the matters referred to in subparagraphs (b)(1) and (2)) is ascertainable only by inference from:

(1) other dispatch offers, dispatch bids or rebids made by the Generator or Market Participant, or in relation to which the Generator or Market Participant had substantial control or influence;

(2) other conduct (including any pattern of conduct), knowledge, belief or intention of the relevant Generator or Market Participant;

(3) the conduct (including any pattern of conduct), knowledge, belief or intention of any other person;

(4) information published by AEMO to the relevant Generator or Market Participant; or

(5) any other relevant circumstances.

(d) A rebid must be made as soon as practicable after the Scheduled Generator, Semi-Scheduled Generator or Market Participant becomes aware of the change in material conditions and circumstances on the basis of which it decides to vary its dispatch offer or dispatch bid.

(e) In any proceeding in which a contravention of paragraph (d) is alleged, in determining whether the Generator or Market Participant made a rebid as soon as practicable, a court must have regard to:

(1) the market design principle set out in clause 3.1.4(a)(2); and

(2) the importance of rebids being made, where possible, in sufficient time to allow reasonable opportunity for other Market Participants to respond (including by making responsive rebids, by bringing one or more generating units into operation or increasing or decreasing the loading level of any generating units, or by adjusting the loading level of any load) prior to:

(i) the commencement of the trading interval to which the rebid relates; or
(ii) the commencement of any dispatch interval within that trading interval.

and may have regard to any other relevant matter, including any of the matters referred to in sub-paragraphs (c)(1) to (5).

Note
This clause is a rebidding civil penalty provision for the purposes of the National Electricity Law. (See clause 6(2) of the National Electricity (South Australia) Regulations.)

3.8.23 Failure to conform to dispatch instructions

(a) If a scheduled generating unit, scheduled network service or scheduled load fails to respond to a dispatch instruction within a tolerable time and accuracy (as determined in AEMO's reasonable opinion), then the scheduled generating unit, scheduled network service or scheduled load (as the case may be):

(1) is to be declared and identified as non-conforming; and

(2) cannot be used as the basis for setting spot prices.

(b) If a semi-scheduled generating unit fails to respond to a dispatch instruction within a tolerable time and accuracy (as determined in AEMO's reasonable opinion) in a semi-dispatch interval where the unit's actual generation is more than the dispatch level, the unit is to be declared and identified as non-conforming and cannot be used as the basis for setting spot prices.

(c) If a scheduled generating unit, semi-scheduled generating unit, scheduled network service or scheduled load is identified as non-conforming under paragraphs (a) or (b):

(1) AEMO must advise the Scheduled Generator, Semi-Scheduled Generator, Scheduled Network Service Provider or Market Customer that the relevant generating unit, scheduled network service or scheduled load is identified as non-conforming, and request and log a reason for the non-compliance with the dispatch instruction;

(2) if in AEMO's opinion modification of plant parameters is necessary or desirable, AEMO must request the Scheduled Generator, Semi-Scheduled Generator, Scheduled Network Service Provider or Market Customer to submit modified plant parameters to satisfy AEMO that a realistic real time dispatch schedule can be carried out;

(3) should a Scheduled Generator or Semi-Scheduled Generator fail to meet the requests set out subparagraphs (1) and (2) or if AEMO is not satisfied that the generating unit will respond to future dispatch instructions as required, AEMO must direct the generating unit's output to follow, as far as is practicable, a specified output profile to be determined at its discretion by AEMO;

(4) should a Scheduled Network Service Provider fail to meet the requests set out in subparagraphs (1) and (2) or if AEMO is not satisfied that the scheduled network service will respond to future dispatch instructions as required, AEMO must direct the scheduled network service to follow,
as far as is practicable, a specified transfer profile to be determined at its discretion by AEMO; and

(5) should a Market Customer not meet the requests set out in subparagraphs (1) and (2) within a reasonable time of the request, or if AEMO is not satisfied that the scheduled load will respond to future dispatch instructions as required, AEMO acting reasonably may invoke a default dispatch bid lodged by the relevant Market Customer or apply constraints as it deems appropriate.

(d) Until a Scheduled Generator, Semi-Scheduled Generator, Scheduled Network Service Provider or Market Customer satisfactorily responds to the requests under paragraphs (c)(1) and (2) and AEMO is satisfied that the generating unit, scheduled network service or scheduled load (as the case may be) will respond to future dispatch instructions as required, the generating unit, scheduled network service or scheduled load (as the case may be) continues to be non-conforming.

(e) If a generating unit, scheduled network service or scheduled load (as the case may be) continues to be non-conforming under this clause 3.8.23 after a reasonable period of time, AEMO must prepare a report setting out the details of the non-conformance and forward a copy of the report to the Scheduled Generator, Semi-Scheduled Generator, Scheduled Network Service Provider or Market Customer (as the case may be) and the AER.

(f) The direction referred to in paragraphs (c)(3) and (4) must remain in place until the Scheduled Generator, Semi-Scheduled Generator or Scheduled Network Service Provider (whichever is relevant) satisfies AEMO of rectification of the cause of the non-conformance.

(g) If an ancillary service generating unit or ancillary service load is enabled to provide a market ancillary service and fails to respond in the manner contemplated by the market ancillary service specification (as determined in AEMO's reasonable opinion), then:

(1) the ancillary service generating unit or ancillary service load is to be declared and identified as non-conforming;

(2) AEMO must advise the relevant Market Participant that the ancillary service generating unit or ancillary service load is identified as non-conforming, and request a reason for the non-conformance. The relevant Market Participant must promptly provide a reason if requested to do so, and the reason is to be logged; and

(3) AEMO may set a fixed level for the relevant ancillary service (in this clause 3.8.23 called the 'fixed constraint') for the ancillary service generating unit or ancillary service load and the relevant Market Participant must ensure that the ancillary service generating unit or ancillary service load complies with the fixed constraint set by AEMO.

(h) AEMO must lift the fixed constraint in respect of an ancillary service generating unit or ancillary service load when AEMO is reasonably satisfied (as a result of a test or otherwise) that the ancillary service generating unit or
ancillary service load is capable of responding in the manner contemplated by the market ancillary service specification.

(i) In assessing a report of non-conformance with a dispatch instruction by a scheduled load, the AER shall have regard to whether a default dispatch bid had been lodged with AEMO and was, or could have reasonably been, applied in the circumstances applicable to that scheduled load.

3.8.24 Scheduling errors

(a) A scheduling error is any one of the following circumstances:

(1) the dispute resolution panel determines under rule 8.2 that AEMO has failed to follow the central dispatch process set out in this rule 3.8; or

(2) AEMO declares that it failed to follow the central dispatch process set out in this rule 3.8; or

(3) AEMO determines under clause 3.9.2B(d) that a dispatch interval contained a manifestly incorrect input.

(b) Spot prices and ancillary service prices will not be adjusted due to the occurrence of a scheduling error except where the scheduling error arises through the application of clause 3.9.2B.

3.9 Price Determination

3.9.1 Principles applicable to spot price determination

(a) The principles applying to the determination of prices in the spot market are as follows:

(1) a dispatch price at a regional reference node is determined by the central dispatch process for each dispatch interval;

(2) a spot price at a regional reference node is the time-weighted average of the dispatch prices at that regional reference node in a trading interval;

(2A) the central dispatch process must determine an ancillary service price for each market ancillary service at each regional reference node for every dispatch interval;

(3) dispatch prices determine dispatch such that a generating unit or load whose dispatch bid or dispatch offer at a location is below the spot price at that location will normally be dispatched;

(3A) generating units, scheduled network services or scheduled loads which operate in accordance with a direction, are to be taken into account in the central dispatch process, but the dispatch offer, in the case of a generating unit or scheduled network service, which operates in accordance with a direction, or the dispatch bid, in the case of a scheduled load which operates in accordance with a direction, will not be used in the calculation of the dispatch price in the relevant dispatch interval;
ancillary service generating units and ancillary service loads the subject of a fixed constraint (within the meaning of clause 3.8.23(g)) are to be taken into account in the central dispatch process, but the price in a market ancillary service offer which operates in accordance with a fixed constraint will not be used in the calculation of the ancillary service price for that market ancillary service in the relevant dispatch interval;

(3C) generating units or loads which operate in accordance with a direction to provide an ancillary service are to be taken into account in the central dispatch process, but the price in a market ancillary service offer which operates in accordance with a direction, will not be used in the calculation of the ancillary service price for that market ancillary service in the relevant dispatch interval;

(4) network losses, network constraints, the availability of scheduled network services and network dispatch offers are taken into account in the determination of dispatch and consequently affect dispatch prices, spot prices and (apart from network losses) ancillary services prices;

(5) where the energy output of a Registered Participant is limited above or below the level at which it would otherwise have been dispatched by AEMO on the basis of its dispatch offer or dispatch bid due to an ancillary services direction, the Registered Participant's dispatch offer or dispatch bid is taken into account in the determination of dispatch but the dispatch offer or dispatch bid will not be used in the calculation of the dispatch price for energy in the relevant dispatch interval;

(5A) market ancillary service offers, in other ancillary services markets, due to an ancillary services direction are taken into account in the determination of dispatch and consequently affect ancillary service prices in those other ancillary services markets;

(6) when the spot price is determined, it applies to both sales and purchases of electricity at a particular location and time;

(6A) when an ancillary service price is determined for an ancillary service, it applies to purchases of that ancillary service;

(6B) when an ancillary service price is determined under paragraph (6A) for a regulation service, it applies to purchases of that regulation service and, where appropriate, purchases of a delayed service;

(7) spot prices and dispatch prices provide Market Participants with signals as to the value of providing or cost of consuming electricity at a particular location at a particular time; and

(7A) ancillary service prices provide Ancillary Service Providers with signals as to the value of providing the relevant market ancillary service within a particular region at a particular time.

(b) A single regional reference price which is the spot price at the regional reference node provides a reference from which the spot prices are determined within each region.
(c) The local spot price at each transmission network connection point is the spot price at the regional reference node for the region to which the connection point is assigned multiplied by the relevant intra-regional loss factor applicable to that connection point.

Note
Where two intra-regional loss factors are determined for a transmission network connection point under clause 3.6.2(b)(2), AEMO will determine the relevant intra-regional loss factor for use under this clause in accordance with the procedure determined under clause 3.6.2(d1).

3.9.2 Determination of spot prices

(a) [Deleted]

(b) [Deleted]

c) Each time the dispatch algorithm is run by AEMO, it must determine a dispatch price for each regional reference node for a dispatch interval in accordance with clause 3.8.21(b), provided that if AEMO fails to run the dispatch algorithm to determine dispatch prices for any dispatch interval then the dispatch price for that dispatch interval is the last dispatch price determined by the dispatch algorithm prior to the relevant dispatch interval.

d) The dispatch price at a regional reference node represents the marginal value of supply at that location and time, this being determined as the price of meeting an incremental change in load at that location and time in accordance with clause 3.8.1(b).

e) Notwithstanding clauses 3.9.2(c) or (d), for any dispatch interval if:

(1) the dispatch price for that dispatch interval has not already been set by the central dispatch process and AEMO reasonably determines that the central dispatch process may determine that all load in a region could not otherwise be supplied and AEMO issues instructions that are current for that dispatch interval to Network Service Providers or Market Participants to shed load, then AEMO must set the dispatch price at that region's regional reference node to equal the market price cap;

(2) AEMO has declared a dispatch interval to be an intervention price dispatch interval under clause 3.9.3(a), then subject to clauses 3.9.3(c) and 3.9.3(d) AEMO must set the dispatch price in accordance with clause 3.9.3;

(3) [Deleted]

(4) an administered price period in accordance with clause 3.14.2 applies, then AEMO must limit the dispatch price in accordance with clause 3.14.2(d1); and

(5) AEMO has made a declaration that the spot market in a region is suspended under clause 3.14.4, then AEMO must set the dispatch price for each dispatch interval during the period for which the spot market is suspended in accordance with clause 3.14.5.

(f) [Deleted]
(g) [Deleted]

(h) The spot price at a regional reference node for a trading interval equals the time weighted average of the dispatch prices at the regional reference node for each of the dispatch intervals in the trading interval.

(i) [Deleted]

(j) [Deleted]

(k) If a test is being conducted on a generating unit or scheduled load in accordance with clause 3.11.2 and for the purpose of conducting that test, the generating unit or scheduled load is excluded from central dispatch, then that generating unit or scheduled load cannot be used to set the dispatch price for energy in the relevant dispatch interval.

3.9.2A Determination of ancillary services prices

(a) Each time the dispatch algorithm is run by AEMO, it must determine an ancillary service price for each market ancillary service for each regional reference node which is to apply until the next time the dispatch algorithm is run, provided that if AEMO fails to run the dispatch algorithm to determine ancillary service prices for any dispatch interval then the ancillary service price for that dispatch interval is the last ancillary service price determined by the dispatch algorithm prior to the relevant dispatch interval.

(b) For each market ancillary service, including the regulating raise service and the regulating lower service, each time the dispatch algorithm is run by AEMO where a local ancillary services constraint has been applied, AEMO must:

1. calculate the marginal price of meeting any global market ancillary service requirement for that service;
2. calculate the marginal price of meeting each local market ancillary service requirement for that service and;
3. identify for each local market ancillary service requirement the regions requiring the service.

(b1) An ancillary service price for a region is the sum of:

1. the marginal price of meeting any global market ancillary service requirement for that service; and
2. the marginal price of meeting each local market ancillary service requirement for that service in that region.

(c) If an ancillary service price determined using the dispatch algorithm under clause 3.9.2A(a):

1. is less than zero, then the ancillary service price is reset to zero; and
2. is greater than the market price cap, then the ancillary service price is reset to the market price cap.
(c1) If a marginal price calculated pursuant to clause 3.9.2A(b) is greater than the market price cap, then that marginal price is reset to the market price cap.

(d) If a test is being conducted on a generating unit or scheduled load in accordance with clause 3.11.2 and for the purpose of conducting that test, the generating unit or scheduled load is excluded from central dispatch, then that generating unit or scheduled load cannot be used to set ancillary service prices.

3.9.2B Pricing where AEMO determines a manifestly incorrect input

(a) For the purposes of this clause:

Input means any value that is used by the dispatch algorithm including measurements of power system status, five minute demand forecast values, constraint equations entered by AEMO, or software setup but not including dispatch bids and dispatch offers submitted by Registered Participants.

Last correct dispatch interval means the most recent dispatch interval preceding the affected dispatch interval that is not itself an affected dispatch interval.

(b) AEMO may apply the automated procedures developed in accordance with clause 3.9.2B(h), to identify a dispatch interval as subject to review ("a dispatch interval subject to review").

(c) AEMO may also determine that a dispatch interval is subject to review if AEMO considers that it is likely to be subject to a manifestly incorrect input, but only where the dispatch interval immediately preceding it was a dispatch interval subject to review.

(d) AEMO must determine whether a dispatch interval subject to review contained a manifestly incorrect input to the dispatch algorithm ("an affected dispatch interval").

(e) Where AEMO determines an affected dispatch interval, AEMO must:

(1) replace all dispatch prices and ancillary service prices with the corresponding prices for the last correct dispatch interval; and

(2) recalculate, in accordance with clause 3.9.2(h), and adjust all spot prices relevant to each affected dispatch interval.

(f) AEMO may only carry out the action described in clause 3.9.2B(e) if no more than 30 minutes have elapsed since the publication of the dispatch prices for the dispatch interval subject to review.

(g) As soon as reasonably practicable after the action as described in clause 3.9.2B(e), AEMO must publish a report outlining:

(1) The reasons for the determination under clause 3.9.2B(d);

(2) Whether that determination was correct;

(3) What action will be taken to minimise the risk of a similar event in future.
(h) *AEMO* must, in consultation with *Registered Participants*, develop procedures for the automatic identification of *dispatch intervals* subject to review under clause 3.9.2B(b) ("the automated procedures").

(i) The purpose of the automated procedures is to detect instances where manifestly incorrect inputs may have resulted in material differences in pricing outcomes.

(j) [Deleted]

(k) At least once each calendar year, *AEMO* must review the effectiveness of the automated procedures referred to in clause 3.9.2B(h).

(l) *AEMO* must report on the findings of the review under clause 3.9.2B(k) and must include in that report details of all *dispatch intervals* subject to review that were not affected *dispatch intervals* and an analysis of why such intervals were identified as subject to review.

(m) [Deleted]

### 3.9.3 Pricing in the event of intervention by *AEMO*

(a) In respect of a *dispatch interval* where a *AEMO intervention event* occurs *AEMO* must declare that *dispatch interval* to be an *intervention price dispatch interval*.

(b) Subject to paragraphs (c) and (d), *AEMO* must in accordance with the methodology or assumptions *published* pursuant to paragraph (e) set the *dispatch price* and *ancillary service prices* for an *intervention price dispatch interval* at the value which *AEMO*, in its reasonable opinion, considers would have applied as the *dispatch price* and *ancillary service price* for that *dispatch interval* in the relevant *region* had the *AEMO intervention event* not occurred.

(c) *AEMO* may continue to set *dispatch prices* pursuant to clause 3.9.2 and *ancillary service prices* pursuant to clause 3.9.2A until the later of:

1. the second *dispatch interval* after the first *dispatch interval* in which the *AEMO intervention event* occurred; or
2. if applicable, the second *dispatch interval* after the restoration of the *power system* to a *secure operating state* after any *direction* which constitutes the *AEMO intervention event* was issued,

provided that *AEMO* must use its reasonable endeavours to set *dispatch prices* and *ancillary service prices* pursuant to this clause 3.9.3 as soon as practicable following the *AEMO intervention event*.

(d) *AEMO* must continue to set *dispatch prices* pursuant to clause 3.9.2 and *ancillary service prices* pursuant to clause 3.9.2A if a *direction* given to a *Registered Participant* in respect of *plant* at the *regional reference node* would not in *AEMO*’s reasonable opinion have avoided the need for any *direction* which constitutes the *AEMO intervention event* to be issued.

(e) Subject to paragraph (g), *AEMO* must develop in accordance with the *Rules consultation procedures* and publish details of the methodology it will use,
and any assumptions it may be required to make, to determine dispatch prices and ancillary service prices for the purposes of paragraph (b).

(f) The methodology developed by AEMO under paragraph (e) must wherever reasonably practicable:

1. be consistent with the principles for spot price determination set out in clause 3.9.1;

2. enable AEMO to determine and publish such prices in accordance with clause 3.13.4; and

3. be consistent with the principles for ancillary service price determination set out in clauses 3.9.2 and 3.9.2A.

(g) AEMO may make minor and administrative amendments to the methodology developed under paragraph (e) without complying with the Rules consultation procedures.

### 3.9.3A Reliability standard and settings review

#### Reliability standard and settings guidelines

(a) The Reliability Panel must develop and publish, and may amend from time to time, guidelines (the reliability standard and settings guidelines) that set out the principles and assumptions that the Reliability Panel will use in conducting the reliability standard and settings review.

(b) The Reliability Panel must develop the reliability standard and settings guidelines in accordance with the Rules consultation procedures and must amend the reliability standard and settings guidelines in accordance with the consultation process set out in clauses 8.8.3(d) to (l).

(c) There must be reliability standard and settings guidelines in force at all times after the date on which the Reliability Panel publishes the first reliability standard and settings guidelines under these Rules.

#### Conducting the reliability standard and settings review

(d) By 30 April of each fourth year (with the first four year period ending in 2014), the Reliability Panel must:

1. conduct the reliability standard and settings review in accordance with the Rules consultation procedures and this clause; and

2. publish a report in accordance with clause 3.9.3B on the reliability standard and reliability settings that it recommends should apply on and from 1 July in the year commencing 2 years after the year in which the report is published.

#### Requirements for reliability standard and settings review

(e) In conducting the reliability standard and settings review the Reliability Panel:

1. must comply with the reliability standard and setting guidelines;
(2) must have regard to any terms of reference for the review provided by the AEMC under clause 8.8.3(c);

(3) must have regard to the potential impact of any proposed change to a reliability setting on:
   (i) spot prices;
   (ii) investment in the National Electricity Market;
   (iii) the reliability of the power system; and
   (iv) Market Participants;

(4) must have regard to any value of customer reliability determined by the AER under rule 8.12 which the Reliability Panel considers to be relevant; and

(5) may take into account any other matters specified in the reliability standards and setting guidelines or which the Reliability Panel considers relevant.

(f) The Reliability Panel may only recommend a market price cap or cumulative price threshold which the Reliability Panel considers will:

   (1) allow the reliability standard to be satisfied without use of AEMO's powers to intervene under clauses 3.20.7(a) and 4.8.9(a); and
   (2) in conjunction with other provisions of the Rules, not create risks which threaten the overall integrity of the market.

(g) If the Reliability Panel is of the view that a decrease in either the market price cap or the cumulative price threshold may mean the reliability standard is not maintained, the Reliability Panel may only recommend such a decrease where it has considered any alternative arrangements necessary to maintain the reliability standard.

(h) The Reliability Panel may only recommend a market floor price which the Reliability Panel considers will:

   (1) allow the market to clear in most circumstances; and
   (2) not create substantial risks which threaten the overall stability and integrity of the market.

(i) The Reliability Panel must submit to the AEMC any Rule change proposal that results from a review under this clause as soon as practicable after the review is completed.

3.9.3B Reliability standard and settings review report

A report of the findings of the Reliability Panel in a review under clause 3.9.3A must set out the Reliability Panel’s conclusions and its recommendations in relation to:

(a) the reliability standard;

(b) the level of the reliability settings;
(c) the manner of indexing the market price cap and the cumulative price threshold;

(d) supporting information including:

(1) a description of how the Reliability Panel has conducted the review in accordance with the reliability standard and setting guidelines;

(2) how the Reliability Panel has taken into account any terms of reference for the review provided by the AEMC under clause 8.8.3(c);

(3) details of all relevant market conditions and circumstances on which its recommendation is based (if not specified under subparagraph (d)(1)); and

(4) an assessment of whether the level of the market price cap together with the operation of the cumulative price threshold have achieved the objectives set out in clause 3.9.3A(f).

3.9.3C Reliability standard

(a) The reliability standard for generation and inter-regional transmission elements in the national electricity market is a maximum expected unserved energy (USE) in a region of 0.002% of the total energy demanded in that region for a given financial year.

(b) For the purposes of paragraph (a) unserved energy is to:

(1) include unserved energy associated with power system reliability incidents that result from:

(i) a single credible contingency event on a generating unit or an inter-regional transmission element, that may occur concurrently with generating unit or inter-regional transmission element outages; or

(ii) delays to the construction or commissioning of new generating units or inter-regional transmission elements, including delays due to industrial action or acts of God; and

(2) exclude unserved energy associated with power system security incidents that result from:

(i) multiple contingency events, protected events or non-credible contingency events on a generating unit or an inter-regional transmission element, that may occur concurrently with generating unit or inter-regional transmission element outages;

(ii) outages of transmission network or distribution network elements that do not significantly impact the ability to transfer power into the region where the USE occurred; or

(iii) industrial action or acts of God at existing generating facilities or inter-regional transmission facilities.
3.9.3D Implementation of the reliability standard

(a) *AEMO* must develop, publish and amend from time to time *reliability standard implementation guidelines* that set out how *AEMO* will implement the reliability standard.

(b) The *reliability standard implementation guidelines* must include, without limitation, the approach *AEMO* will use and the assumptions it will make in relation to:

1. demand for electricity;
2. reliability of existing and future generation;
3. intermittent generation;
4. energy constraints;
5. the treatment of extreme weather events; and
6. network constraints.

(b1) In addition to the matters specified in paragraph (b), the *reliability standard implementation guidelines* must set out the factors that *AEMO* will consider in determining whether it has an obligation to publish an *EAAP* under clause 3.7C(d)(2).

(c) *AEMO* must develop and amend the *reliability standard implementation guidelines* in consultation with the Reliability Panel, Registered Participants and other interested persons in accordance with the *Rules consultation procedures*.

(d) There must be *reliability standard implementation guidelines* in force at all times after the date on which *AEMO* publishes the first *reliability standard implementation guidelines* under these *Rules*.

(e) *AEMO* must review the *reliability standard implementation guidelines* at least once every four years. *AEMO* must conduct the review in consultation with the Reliability Panel, Registered Participants and other interested persons in accordance with the *Rules consultation procedures*.

3.9.4 Market Price Cap

(a) The *market price cap* is a price cap which is to be applied to *dispatch prices*.

(b) The value of the *market price cap* for each *financial year* is the dollar amount per MWh calculated by the *AEMC* under paragraph (c).

**Note**

The current value of the *market price cap* is set out in a schedule of reliability settings published on the AEMC’s website www.aemc.gov.au

(c) By 28 February of each year (commencing 2012), the *AEMC* must calculate the *market price cap* to apply on and from 1 July of that year in accordance with paragraphs (d) and (e) and *publish* its calculation on its website as part of a schedule of *reliability* settings.
Subject to paragraph (e), the AEMC must calculate the market price cap using the following formula:

\[
MPC^x = BV_{MPC} \times \frac{Q_1^c + Q_2^c + Q_3^c + Q_4^c}{Q_1^b + Q_2^b + Q_3^b + Q_4^b}
\]

Where:

MPC is the market price cap in dollars per MWh;

x is the financial year for which the market price cap is being calculated;

BV_{MPC} is $12,500/MWh (being the value of the market price cap prior to 1 July 2012);

Q1 to Q4 are the values of the Reliability Settings Index for each of the four quarters of years c and b (as the case may be) as at five months before the start of year x;

Reliability Settings Index is the All groups, Australia CPI found at Index Numbers, All groups, Australia, in Tables 1 and 2 of the Consumer Price Index, Australia published by the Australian Bureau of Statistics for the relevant quarter, except where that index ceases to be published or is substantially changed, in which case the Reliability Settings Index will be such other index as is determined by the AEMC as suitable;

c is the calendar year commencing 18 months before the start of year x; and

b is calendar year 2010.

If the value calculated by the AEMC under paragraph (d) is:

(1) not in whole hundreds of dollars, then the market price cap for year x will be the value calculated under paragraph (d) rounded to the nearest $100/MWh;

(2) less than the market price cap applied under this clause 3.9.4 for the preceding financial year (year x-1), then the market price cap for year x will be the value of the market price cap for year x-1.

### 3.9.5 Application of the Market Price Cap

(a) Dispatch prices at regional reference nodes must not exceed the market price cap.

(b) If central dispatch and determination of dispatch prices in accordance with rule 3.8, and clauses 3.9.2 and 3.9.3 would otherwise result in a dispatch price greater than the market price cap at any regional reference node, then subject to clause 3.9.5(c), the dispatch price at that regional reference node must be set to the market price cap.

(c) If the dispatch price at any regional reference node is set to the market price cap under clause 3.9.2 or clause 3.9.5 then dispatch prices at all other regional reference nodes connected by a regulated interconnector or regulated interconnectors that have an energy flow towards that regional reference node must not exceed the market price cap divided by the average loss factor that
applies for energy flow in that direction for that dispatch interval and determined in accordance with clause 3.9.5(d).

(d) AEMO must determine the average loss factors applicable to clause 3.9.5(c) by reference to the inter-regional loss factor equations relating to the relevant regulated interconnector.

3.9.6 Market Floor Price

(a) The market floor price is a price floor which is to be applied to dispatch prices.

(b) The value of the market floor price is $-1,000/MWh.

(c) [Deleted]

(d) [Deleted]

(e) [Deleted]

3.9.6A Application of the Market Floor Price

(a) Dispatch prices at regional reference nodes must not be less than the market floor price.

(b) If central dispatch and determination of dispatch prices in accordance with rule 3.8, and clauses 3.9.2 and 3.9.3 would otherwise result in a dispatch price less than the market floor price at any regional reference node, then subject to clause 3.9.6A(c), the dispatch price at that regional reference node must be set to the market floor price.

(c) If the dispatch price at any regional reference node is set to the market floor price under clause 3.9.6A then dispatch prices at all other regional reference nodes connected by a regulated interconnector or regulated interconnectors that have an energy flow away from that regional reference node must be equal to or greater than the market floor price multiplied by the average loss factor that applies for energy flow in that direction for that dispatch interval and determined in accordance with clause 3.9.6A(d).

(d) AEMO must determine the average loss factors applicable to clause 3.9.6A(c) by reference to the inter-regional loss factor equations relating to the relevant regulated interconnector.

3.9.7 Pricing for constrained-on scheduled generating units

(a) In the event that a network constraint causes a scheduled generating unit to be constrained-on in any dispatch interval, that scheduled generating unit must comply with dispatch instructions from AEMO in accordance with its availability as specified in its dispatch offer but may not be taken into account in the determination of the dispatch price in that dispatch interval.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)
(b) A Scheduled Generator that is constrained-on in accordance with clause 3.9.7(a) is not entitled to receive from AEMO any compensation due to its dispatch price being less than its dispatch offer price.

(c) In the event that:

1. an inertia network service under an inertia services agreement is enabled such that an inertia generating unit is constrained on in any dispatch interval to provide inertia; or

2. a system strength service under a system strength services agreement is enabled such that a system strength generating unit is constrained on in any dispatch interval to provide a system strength service,

the relevant generating unit must comply with dispatch instructions from AEMO in accordance with its availability as specified in its dispatch offer but may not be taken into account in the determination of the dispatch price in that dispatch interval except to the extent that the generating unit is dispatched at a level above its minimum loading level.

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(d) A Scheduled Generator that is constrained on in accordance with paragraph (c) is not entitled to receive from AEMO any compensation due to its dispatch price being less than its dispatch offer price.

3.10 [Deleted]

3.11 Ancillary Services

3.11.1 Introduction

(a) Ancillary services are services that are essential to the management of power system security, facilitate orderly trading in electricity and ensure that electricity supplies are of acceptable quality.

(b) Market ancillary services are ancillary services acquired by AEMO as part of the spot market in accordance with this Chapter 3. The prices for market ancillary services are determined using the dispatch algorithm.

(c) Non-market ancillary services are ancillary services not acquired by AEMO as part of the spot market, but acquired:

1. in the case of SRAS, by AEMO under ancillary services agreements, with the prices for SRAS being determined in accordance with the relevant ancillary services agreements; and

2. in the case of NSCAS:

   i. by Transmission Network Service Providers under connection agreements or network support agreements to meet an NSCAS need; and
(ii) in the circumstances contemplated in clause 3.11.3(c), by AEMO under ancillary services agreements entered into following a call for offers made in accordance with rule 3.11.5 to meet a NSCAS gap only for power system security and reliability of supply of the transmission network in accordance with the power system security standards and the reliability standard, with the prices for NSCAS being determined in accordance with the relevant agreements;

(3) in the case of NMAS other than SRAS and NSCAS, by Transmission Network Service Providers under connection agreements or network support agreements to meet the service standards in accordance with the technical requirements of schedule 5.1 or in applicable regulatory instruments, with the prices for those services being determined in accordance with the relevant agreements.

(d) AEMO may instruct a person to provide a non-market ancillary service under an ancillary services agreement or otherwise in accordance with the relevant performance standards, and any person so instructed must use reasonable endeavours to comply with that instruction.

(e) AEMO is not responsible for payment to a person for non-market ancillary services provided by that person under a connection agreement or a network support agreement.

3.11.2 Market ancillary services

(a) The market ancillary services are:

(1) the fast raise service;
(2) the fast lower service;
(3) the slow raise service;
(4) the slow lower service;
(5) the regulating raise service;
(6) the regulating lower service;
(7) the delayed raise service; and
(8) the delayed lower service.

(b) AEMO must make and publish a market ancillary service specification containing:

(1) a detailed description of each kind of market ancillary service; and
(2) the performance parameters and requirements which must be satisfied in order for a service to qualify as the relevant market ancillary service and also when a Market Participant provides the relevant kind of market ancillary service.
(c) AEMO may amend the market ancillary service specification, from time to time.

(d) AEMO must comply with the Rules consultation procedures when making or amending the market ancillary service specification.

(e) An amendment to the market ancillary service specification must not take effect until at least 30 days after the amendment has been published.

(f) In addition to the requirements under rule 4.15, a Market Participant which has classified a generating unit as an ancillary service generating unit or a load as an ancillary service load must install and maintain in accordance with the standards referred to in clause 3.11.2(g) monitoring equipment to monitor and record the response of the ancillary service generating unit or ancillary service load to changes in the frequency of the power system.

(g) AEMO must develop, and may amend from time to time, standards which must be met by Market Participants in installing and maintaining the equipment referred to in paragraph 3.11.2(f).

(h) AEMO may request a Market Participant with an ancillary service generating unit or an ancillary service load to provide to AEMO a report detailing how the relevant facility responded to a particular change or particular changes in the frequency of the power system. A Market Participant must provide a report requested under this paragraph 3.11.2(h) promptly but, in any event, in no more than 20 business days after notice to do so.

(i) AEMO may from time to time require a Registered Participant which provides a market ancillary service under the Rules to demonstrate the relevant plant’s capability to provide the market ancillary service to the satisfaction of AEMO according to standard test procedures. A Registered Participant must promptly comply with a request by AEMO under this clause.

3.11.3 Acquisition of Network Support and Control Ancillary Service

(a) Where an NTNDP identifies an NSCAS gap, AEMO may request the relevant Transmission Network Service Provider to advise when the Transmission Network Service Provider will have arrangements in place to meet that NSCAS gap, or provide reasons why the NSCAS gap will not be met.

(b) Within 30 days of AEMO’s request under paragraph (a), the Transmission Network Service Provider must provide a response to AEMO. If the Transmission Network Service Provider proposes to put in place arrangements to meet the relevant NSCAS gap, it must include in its response full details of those arrangements.

(c) If, after considering any response made under paragraph (b), AEMO:

(1) considers that the relevant NSCAS gap will remain; and

(2) considers it is necessary to acquire NSCAS to meet the relevant NSCAS gap to prevent an adverse impact on power system security and reliability of supply of the transmission network in accordance with the power system security standards and the reliability standard,
AEMO:

(3) must publish details of why it considers that the relevant NSCAS gap will remain; and

(4) must use reasonable endeavours to acquire NSCAS to meet the relevant NSCAS gap in accordance with clause 3.11.5.

3.11.4 Guidelines and objectives for acquisition of network support and control ancillary services

(a) In this clause 3.11.4:

NSCAS description means a detailed description of each type of network support and control ancillary service.

NSCAS quantity procedure means a procedure that determines the location and quantity of each type of network support and control ancillary service required.

(a1) AEMO must develop and publish the NSCAS description in accordance with the Rules consultation procedures.

(b) AEMO must develop and publish the NSCAS quantity procedure in accordance with the Rules consultation procedures.

(c) AEMO may amend the NSCAS description and the NSCAS quantity procedure.

(d) AEMO must comply with the Rules consultation procedures when making or amending the NSCAS description or the NSCAS quantity procedure.

(e) AEMO may make minor and administrative amendments to the NSCAS description or the NSCAS quantity procedure without complying with the Rules consultation procedures.

3.11.5 Tender process for network support and control ancillary services

(a) In this clause 3.11.5:

NSCAS tender guidelines means the guidelines developed and published by AEMO in accordance with paragraph (b) as in force from time to time, and includes amendments made in accordance with paragraphs (c) and (d).

(a1) If AEMO proposes to acquire a network support and control ancillary service, AEMO must call for offers from persons who are in a position to provide the network support and control ancillary service in accordance with the NSCAS tender guidelines.

(b) AEMO must determine and publish the NSCAS tender guidelines. The NSCAS tender guidelines must contain the following:

(1) a requirement for AEMO to call for NSCAS expressions of interest before issuing an NSCAS invitation to tender in relation to any required network support and control ancillary services;
(2) a requirement that a person who is to provide network support and control ancillary services under an ancillary services agreement has the facility tested in accordance with the NSCAS tender guidelines;

(3) a requirement for a Network Service Provider or other Registered Participant to assist a prospective tenderer in identifying and, if possible, resolving issues that would prevent the delivery of effective network support and control ancillary services proposed by a prospective tenderer;

(4) the timeframes over which AEMO's assessment of NSCAS expressions of interest, NSCAS tenders and physical testing of selected network support and control ancillary services will occur;

(5) a requirement for a tenderer to provide sufficient data, models and parameters of relevant plant in accordance with the requirements specified in the Power System Model Guidelines, the Power System Design Data Sheet and the Power System Setting Data Sheet, to facilitate a thorough assessment of the network impacts and power station impacts of the use of the relevant network support and control ancillary service;

(6) the terms and conditions of the ancillary services agreement that a successful tenderer would be expected to enter into with AEMO;

(7) the principles AEMO will apply in assessing NSCAS expressions of interest and NSCAS tenders; and

(8) any other matter considered appropriate by AEMO.

c) AEMO may amend the NSCAS tender guidelines, subject to paragraph (d), and must comply with the Rules consultation procedures when making or amending the NSCAS tender guidelines.

d) AEMO may make minor and administrative amendments to the NSCAS tender guidelines without complying with the Rules consultation procedures.

e) AEMO is not under any obligation to accept the lowest priced NSCAS tender or any NSCAS tender in response to an NSCAS invitation to tender.

f) A Network Service Provider must:

(1) negotiate in good faith with a prospective tenderer in respect of issues the NSCAS tender guidelines require a prospective tenderer to discuss and, if possible, resolve with a Network Service Provider; and

(2) participate in, or facilitate, testing of a network support and control ancillary service required by the NSCAS tender guidelines where it is reasonable and practicable to do so, and when participating in or facilitating such activities, the Network Service Provider will be entitled to recover from the relevant prospective tenderer all reasonable costs incurred by the Network Service Provider and for such purposes the activities of the Network Service Provider will be treated as negotiable services.
(g) Where a person submits an NSCAS tender in response to an NSCAS invitation to tender and AEMO wishes to negotiate an aspect of that NSCAS tender, AEMO and that person must negotiate in good faith concerning that aspect.

(h) In assessing any tenders submitted to meet a particular NSCAS gap, AEMO must first determine whether those tenders are competitive. The tenders submitted to meet a particular NSCAS gap will be deemed to be competitive if the quantity of NSCAS that AEMO is seeking can be supplied from the conforming tenders received by AEMO with any one conforming tender discarded or all conforming tenders from any one party discarded. If the tenders submitted to meet a particular NSCAS gap are not deemed to be competitive, AEMO and NSCAS preferred tenderers, must negotiate in good faith to agree reasonable terms and conditions for the supply of the relevant type of NSCAS, taking into account the need to:

1. subject to subparagraph (h)(2), so far as practicable minimise the overall cost of supply of that service; and
2. appropriately remunerate the providers of the relevant NSCAS for that service.

(i) If AEMO and a NSCAS preferred tenderer cannot agree on the terms and conditions for the supply of a NSCAS after 21 business days from delivery to the preferred tenderer of a written notice from AEMO to negotiate, either AEMO or the preferred tenderer may refer the matter to the Adviser for the determination of a dispute as to those terms and conditions in accordance with rule 8.2.

(j) If AEMO calls for offers under paragraph (a1), AEMO must give a notice to Registered Participants and NSCAS providers when the tender process is complete.

(k) Within 5 business days of AEMO giving a notice under paragraph (j), AEMO must publish the total estimated annual costs and quantities of each type of NSCAS acquired by AEMO under ancillary services agreements in respect of each region and in total and provide a breakdown of those costs and quantities relating to each facility contracted under those agreements.

(l) An NSCAS provider must comply with an ancillary services agreement under which they provide one or more network support and control ancillary services.

(m) AEMO may from time to time require an NSCAS Provider which provides a network support and control ancillary service under an ancillary services agreement to demonstrate the relevant plant's capability to provide the network support and control ancillary service to the satisfaction of AEMO according to standard test procedures. An NSCAS Provider must promptly comply with a request by AEMO under this clause.

3.11.6 Dispatch of network support and control ancillary services by AEMO

(a) For the avoidance of doubt, AEMO may dispatch NSCAS to:
(1) maintain power system security and reliability of supply of the transmission network in accordance with the power system security standards and the reliability standard; and

(2) maintain or increase the power transfer capability of that transmission network so as to maximise the present value of net economic benefit to all those who produce, consume or transport electricity in the market, but AEMO may only call for offers to acquire NSCAS to maintain power system security and reliability of supply of the transmission network in accordance with the power system security standards and the reliability standard.

(a1) AEMO must develop procedures for:

(1) dispatching NCAS; and

(2) reporting to Registered Participants and NSCAS providers, on a periodic basis, on the effectiveness of the dispatch of network support and control ancillary services using criteria related to the performance of the power system specified in the procedures developed under subparagraph (a1)(1).

(b) AEMO must publish the procedures developed under this clause 3.11.6.

(c) AEMO may amend a procedure developed under this clause 3.11.6, from time to time.

(d) AEMO must develop and publish guidelines for the dispatch of NSCAS to support the relevant procedure developed under subparagraph (a1)(1).

(e) Subject to paragraph (f), AEMO must comply with the Rules consultation procedures when making or amending the guidelines in paragraph (d).

(f) AEMO may make minor and administrative amendments to the guidelines in paragraph (d) without complying with the Rules consultation procedures.

3.11.7 Guidelines and objectives for acquisition of system restart ancillary services by AEMO

(a) [not used].

(a1) AEMO must use reasonable endeavours to acquire system restart ancillary services to meet the system restart standard at the lowest cost (the SRAS Procurement Objective).

(b) AEMO must consult with the relevant Network Service Provider to identify and resolve issues in relation to the capability of any system restart ancillary service proposed to be provided by an SRAS Provider in an electrical sub-network to meet the system restart standard.

(c) AEMO must develop and publish the SRAS Guideline. The SRAS Guideline must be designed to ensure that the system restart standard is met at the lowest cost.

(d) The SRAS Guideline must include:
(1) a description of the technical and availability requirements of system restart ancillary services;

(2) a process for meeting the aggregate required reliability of system restart ancillary services for each electrical sub-network under clause 8.8.3(aa)(3);

(3) a process for the modelling, assessment and physical testing of system restart ancillary services proposed to be provided by an SRAS Provider, including any assumptions to be made by AEMO regarding the state of transmission elements during a major supply disruption;

(4) a process for determining the number and location of system restart ancillary services required to be procured for each electrical sub-network consistent with the system restart standard;

(5) guidance to Registered Participants on the factors that AEMO must take into account when making a decision to follow a particular type of procurement process to acquire system restart ancillary services to meet the SRAS Procurement Objective;

(6) a process for AEMO to follow for contacting a potential SRAS Provider to negotiate the provision of system restart ancillary services without a competitive tender process; and

(7) a process for a potential SRAS provider to contact AEMO to offer the provision of system restart ancillary services without a competitive tender process, which offer AEMO is in no way obliged to accept.

(e) AEMO may amend the SRAS Guideline from time to time.

(f) When making or amending the SRAS Guideline, AEMO must, subject to paragraph (g), consult with:

(1) Registered Participants; and

(2) Such other persons who, in AEMO’s reasonable opinion, have, or have identified themselves to AEMO as having, an interest in the SRAS Guideline,

in accordance with the Rules consultation procedures.

(g) AEMO may make minor and administrative amendments to the SRAS Guideline without complying with the Rules consultation procedures.

### 3.11.8 Determination of electrical sub-network boundaries

(a) For the purpose of acquiring system restart ancillary services and determining and implementing the system restart plan, the power system is to be divided into electrical sub-networks.

(b) AEMO must determine the boundaries of the electrical sub-networks in accordance with the guidelines determined by the Reliability Panel under clause 8.8.3(aa)(5), and must publish a report setting out how it has complyed with these guidelines.
3.11.9 Acquisition of system restart ancillary services by AEMO

(a) If AEMO proposes to acquire a system restart ancillary service, AEMO must enter into an ancillary services agreement with a prospective SRAS Provider following the completion of any procurement process to acquire system restart ancillary services which AEMO is satisfied will enable it to meet the SRAS Procurement Objective.

(b) Subject to paragraph (c), AEMO must only acquire system restart ancillary services from a person who is a Registered Participant.

(c) AEMO may enter into an agreement to acquire system restart ancillary services with a person who is not a Registered Participant if that agreement includes a condition for the benefit of AEMO that no system restart ancillary services will be provided under the agreement until that person becomes a Registered Participant.

(d) An SRAS Provider must comply with an ancillary services agreement under which they provide one or more system restart ancillary services.

(e) A dispute concerning any aspect, (other than the aspect of price), of a system restart ancillary services agreement or a call for offers conducted by AEMO for the acquisition of system restart ancillary services, must be dealt with in accordance with rule 8.2.

(f) AEMO may from time to time require an SRAS Provider which provides a system restart ancillary service under an ancillary services agreement to demonstrate the relevant plant's capability to provide the system restart ancillary service to the satisfaction of AEMO according to standard test procedures. An SRAS Provider must promptly comply with a request by AEMO under this clause.

(g) A prospective SRAS Provider must provide to AEMO sufficient data, models and parameters of relevant plant in accordance with the requirements specified in the Power System Model Guidelines, the Power System Design Data Sheet and the Power System Setting Data Sheet, to facilitate a thorough assessment of the network impacts and power station impacts of the use of the relevant system restart ancillary service.

(h) If AEMO seeks to enter into an ancillary services agreement with a prospective SRAS Provider, AEMO and that SRAS Provider must negotiate in good faith as to the terms and conditions of the ancillary services agreement.

(i) A Network Service Provider must:

1. provide any information to AEMO which AEMO reasonably requires in order for AEMO to assess the capability of a system restart ancillary service to meet the system restart standard;

2. negotiate in good faith with a prospective SRAS Provider in respect of identifying and, if possible, resolving issues that would prevent the...
delivery of effective system restart ancillary services proposed by a prospective SRAS Provider; and

(3) participate in, or facilitate, testing of a system restart ancillary service proposed to be provided by a prospective SRAS Provider where it is reasonable and practicable to do so, and when participating in or facilitating such activities, the Network Service Provider will be entitled to recover from the prospective SRAS Provider all reasonable costs incurred by the Network Service Provider and for such purposes the activities of the Network Service Provider will be treated as negotiable services.

3.11.10 Reporting

(a) At least once each year, AEMO must prepare and publish a report detailing the total estimated annual cost for the provision of system restart ancillary services, broken down to charges for availability and use, for each electrical sub-network and for each region.

(b) At least once each year, AEMO must publish a report on:

(1) any electrical sub-network where system restart ancillary services were not acquired by AEMO to a level satisfactory to meet the system restart standard, and reasons why the system restart standard was not met; and

(2) the process followed by AEMO to acquire system restart ancillary services for each electrical sub-network.

3.12 Market Intervention by AEMO

3.12.1 Intervention settlement timetable

(a) AEMO must use reasonable endeavours to complete and fulfil its obligations set out in clauses 3.12.2, 3.12.3, 3.14.5A, 3.14.5B, 3.15.7, 3.15.7A, 3.15.7B, 3.15.8, 3.15.8A, 3.15.9 and 3.15.10C such that final determinations of all total amounts payable or receivable by AEMO under clauses 3.12.2, 3.15.7(a), 3.15.8, 3.15.8A and 3.15.9 for each AEMO intervention event and/or market suspension pricing schedule period (as the case may be) ending during a billing period are reflected:

(1) if practicable, in the routine revised statement issued approximately 20 weeks after the relevant billing period; and

(2) in the routine revised statement issued approximately 30 weeks after the relevant billing period.

(b) Subject to clause 3.12.1(a), AEMO must publish a timetable that sets a date for each of AEMO's and the independent expert's obligations pursuant to clauses 3.12.2, 3.12.3, 3.14.5B(f), 3.14.5B(g), 3.15.7, 3.15.7A, 3.15.7B, 3.15.8, 3.15.8A and 3.15.10C, where required (the intervention settlement timetable).

(c) AEMO must at least once a month revise and publish the intervention settlement timetable to reflect any changes to the intervention settlement timetable.
3.12.2 Affected Participants and Market Customers entitlements to compensation in relation to AEMO intervention

(a) In respect of each intervention price trading interval:

(1) an Affected Participant is entitled to receive from AEMO, or must pay to AEMO, an amount as determined in accordance with this clause 3.12.2 that will put the Affected Participant in the position that the Affected Participant would have been in regarding the scheduled generating unit or scheduled network service, as the case may be, had the AEMO intervention event not occurred, taking into account solely the items listed in paragraph (j);

(2) a Market Customer, other than a Market Customer which was the subject of any direction that constituted the AEMO intervention event, is entitled, in respect of one or more of its scheduled loads, to receive an amount calculated by applying the following formula:

\[ DC = ((RRP \times LF) - BidP) \times QD \]

where:

- DC (in dollars) is the amount the Market Customer is entitled to receive in respect of that scheduled load for the relevant intervention price trading interval;
- RRP (in dollars per MWh) is the regional reference price in the relevant intervention price trading interval determined in accordance with clause 3.9.3;
- LF where the scheduled load's connection point is a transmission connection point, is the relevant intra-regional loss factor at that connection point or where the scheduled load's connection point is a distribution network connection point, is the product of the distribution loss factor at that connection point multiplied by the relevant intra-regional loss factor at the transmission connection point to which it is assigned;
- BidP (in dollars per MWh) is the price of the highest priced price band specified in a dispatch bid for the scheduled load in the relevant intervention price trading interval;
- QD (in MWh) is the difference between the amount of electricity consumed by the scheduled load during the relevant intervention price trading interval determined from the metering data and the amount of electricity which AEMO reasonably determines would have been consumed by the scheduled load if the AEMO intervention event had not occurred,

provided that if DC is negative for the relevant intervention price trading interval, then the adjustment that the Market Customer is entitled to claim in respect of that scheduled load for that intervention price trading interval is zero.
Note

Where two intra-regional loss factors are determined for a transmission network connection point under clause 3.6.2(b)(2), AEMO will determine the relevant intra-regional loss factor for use under this clause in accordance with the procedure determined under clause 3.6.2(d1).

(b) In respect of a single intervention price trading interval, an Affected Participant or Market Customer is not entitled to receive from, or obliged to pay to, AEMO an amount pursuant to this clause 3.12.2 if such an amount is less than $5,000.

(c) In respect of each intervention price trading interval, AEMO must, in accordance with the intervention settlement timetable, notify, in writing:

(1) each Affected Participant (except eligible persons) of:
   (i) the estimated level of dispatch in MW that its scheduled network service or scheduled generating unit would have been dispatched at had the AEMO intervention event not occurred; and
   (ii) an amount equal to:
      (A) the estimated trading amount that it would have received had the AEMO intervention event not occurred based on the level of dispatch in subparagraph (i), less:
      (B) the trading amount for that Affected Participant (excluding from that trading amount the amount referred to in clause 3.15.10C(a)) as set out in its final statement provided pursuant to clause 3.15.14 for the billing period in which the intervention price trading interval occurs;

(2) each eligible person of:
   (i) the estimated level of flow in MW of all relevant directional interconnectors that would have occurred had the AEMO intervention event not occurred; and
   (ii) an amount equal to:
      (A) the estimated amount that person would have been entitled to receive pursuant to clause 3.18.1(b) had the AEMO intervention event not occurred based upon the flows referred to in subparagraph (i); less
      (B) the actual entitlement of that person under clause 3.18.1(b); and

(3) each Market Customer, the amount calculated by AEMO in accordance with paragraph (a)(2) for that Market Customer.

(d) AEMO must include in an Affected Participant's or Market Customer's final statement provided pursuant to clause 3.15.15 for a billing period in which one or more intervention price trading intervals occurred:

(1) the amount notified by AEMO pursuant to paragraph (c) if the absolute value of such amount is greater than $5,000; and
(2) in all other cases no amount in relation to compensation pursuant to this clause 3.12.2.

(e) If the figure calculated in accordance with paragraph (c) is:

(1) negative, the absolute value of that amount is the amount payable to AEMO by the relevant person; and

(2) positive, the absolute value of that amount is the amount receivable from AEMO by the relevant person.

(f) Subject to paragraphs (h) and (i), within 15 business days of receipt of the notice referred to in paragraph (c) an Affected Participant or Market Customer may make a written submission to AEMO in accordance with paragraph (g) claiming that the amount set out in the notice is greater than or less than its entitlement pursuant to paragraph (a)(1) as an Affected Participant or paragraph (a)(2) as a Market Customer, as the case may be.

(g) A written submission made by an Affected Participant or Market Customer pursuant to paragraph (f) must:

(1) itemise each component of the claim;

(2) contain sufficient data and information to substantiate each component of the claim;

(3) if the Affected Participant claims that the amount calculated by AEMO pursuant to paragraphs (c)(1) or (c)(2) is less than the amount the Affected Participant is entitled to receive pursuant to paragraph (a)(1), specify the difference between such amounts (such difference being the affected participant's adjustment claim);

(4) if the Market Customer claims that the amount calculated by AEMO pursuant to paragraph (c)(3) is less than the amount the Market Customer is entitled to receive pursuant to paragraph (a)(2), specify the difference between such amounts (such difference being the market customer's additional claim); and

(5) be signed by an authorised officer of the Affected Participant or Market Customer certifying that the written submission is true and correct.

(h) If an Affected Participant or Market Customer does not deliver to AEMO a written submission in accordance with paragraph (f) it shall cease to have an entitlement to compensation under this clause 3.12.2.

(i) In respect of a single intervention price trading interval an Affected Participant or Market Customer may only make a claim pursuant to paragraph (f) in respect of that intervention price trading interval if it claims that its entitlement or liability pursuant to this clause 3.12.2 is greater than $5,000.

(j) In determining the amount for the purposes of paragraph (a)(1), the following must, as appropriate, be taken into account:

(1) the direct costs incurred or avoided by the Affected Participant in respect of that scheduled generating unit or scheduled network service,
as the case may be, as a result of the *AEMO intervention event* including:

(i) fuel costs in connection with the *scheduled generating unit* or *scheduled network service*;

(ii) incremental maintenance costs in connection with the *scheduled generating unit* or *scheduled network service*; and

(iii) incremental manning costs in connection with the *scheduled generating unit* or *scheduled network service*;

(2) any amounts which the *Affected Participant* is entitled to receive under clauses 3.15.6 and 3.15.6A; and

(3) the *regional reference price published* pursuant to clause 3.13.4(m).

(k) *AEMO* must in accordance with the *intervention settlement timetable* calculate the *additional intervention claim* being the total of:

(1) the sum of the *affected participant's adjustment claims* and *market customer's additional claims* in respect of a *AEMO intervention event*, or in respect of, in *AEMO's* reasonable opinion, a series of related *AEMO intervention events*; plus

(2) the total claims by *Directed Participants* pursuant to clauses 3.15.7B(a), 3.15.7B(a1) and 3.15.7B(a2) in respect of that *AEMO intervention event*, or in respect of that series of related *AEMO intervention events*.

(l) *AEMO* must in accordance with the *intervention settlement timetable*:

(1) refer an *affected participant's adjustment claim* or *market customer's additional claim* to an independent expert to determine such claim in accordance with clause 3.12.3 if the claim is equal to or greater than $20,000 and the *additional intervention claim* that includes that claim is equal to or greater than $100,000; and

(2) determine in its sole discretion whether all other *affected participants' adjustment claims* and *market customers' additional claims* are reasonable and if so pay the amounts claimed in accordance with clause 3.15.10C.

(m) If *AEMO* determines pursuant to paragraph (l) that an *affected participant's adjustment claim* or *market customer's additional claim* in respect of a *AEMO intervention event* is unreasonable, it must in accordance with the *intervention settlement timetable*:

(1) advise the *Affected Participant* or *Market Customer*, as the case may be, in writing of its determination including its reasons for the determination; and

(2) refer the matter to an independent expert to determine the claim for compensation in accordance with clause 3.12.3.

(n) For the purposes of clauses 3.15.8 and 3.15.10C(b) any payment pursuant to paragraph (a) must include interest on the sum of that amount less the payment
made in accordance with 3.15.10C(a)(1), computed at the average bank bill rate for the period from the date on which payment was required to be made under clauses 3.15.16 and 3.15.17 in respect of the final statement for the billing period in which the AEMO intervention event occurred to the date on which payment is required to be made pursuant to clause 3.15.10C.

3.12.3 Role of the Independent Expert in calculating payments in relation to intervention by AEMO and market suspension pricing schedule periods

(a) Subject to paragraph (a1), if a matter is to be referred to an independent expert pursuant to clauses 3.12.2(l), 3.12.2(m), 3.14.5B(f), 3.14.5B(g) or 3.15.7B, AEMO must in accordance with the intervention settlement timetable publish a notice of its proposed nominee as independent expert and appoint such nominee.

(a1) If within 3 business days of publication of AEMO's nominee pursuant to paragraph (a) more than 25% of the Referred Affected Participants, Referred Market Customers, Referred Market Suspension Compensation Claimants and Referred Directed Participants in relation to the relevant AEMO intervention event or market suspension pricing schedule period (as the case may be) object in writing to AEMO's nominee, AEMO must, as soon as reasonably practicable thereafter, request the AEMC to nominate an independent expert.

(a2) If a valid objection pursuant to clause 3.12.3(a1) is made, the AEMC must, within 3 business days of a written request from AEMO, nominate an independent expert to be appointed by AEMO for the purposes of this clause 3.12.3.

(b) AEMO must provide to the independent expert a copy of all written submissions made by Referred Affected Participants, Referred Market Customers, Referred Market Suspension Compensation Claimants or Referred Directed Participants under clause 3.12.2(f), 3.14.5B(a) or 3.15.7B(a).

(b1) To the extent reasonably practicable, all claims arising out of a single AEMO intervention event or market suspension pricing schedule period (as the case may be), or arising out of, in AEMO's reasonable opinion, a series of related AEMO intervention events or market suspension pricing schedule periods (as the case may be), should be determined by the same independent expert as part of the same process.

(c) AEMO must include as part of the independent expert's terms of appointment the following requirements:

(1) In accordance with the intervention settlement timetable the independent expert must:

   (i) determine and publish a draft report setting out:

   (A) as appropriate, the total compensation payable by, or receivable by, Referred Affected Participants and Referred Market Customers under clause 3.12.2(a) pursuant to claims referred to the independent expert pursuant to clauses
3.12.2(l) and 3.12.2(m) in respect of the intervention price trading interval;

(A) the amount of compensation payable to each Referred Market Suspension Compensation Claimant pursuant to clause 3.14.5B;

(B) the total amount of compensation payable to Referred Directed Participants pursuant to clause 3.15.7B; and

(C) the methodology and assumptions, if any, used by the independent expert in making the determination in subparagraphs (c)(1)(ii), (c)(1)(iii) and (c)(1)(iv);

(ii) notify individual assessments by delivery to each Referred Affected Participant and Referred Market Customer and to AEMO of a draft assessment detailing the amount payable or receivable by that party, as the case may be, pursuant to clause 3.12.2(a);

(iii) deliver to each Referred Directed Participant and to AEMO a draft assessment detailing the calculation of the amount of compensation receivable by that party pursuant to clause 3.15.7B; and

(iv) deliver to each Referred Market Suspension Compensation Claimant and to AEMO a draft assessment detailing the calculation of the amount of compensation receivable by that party pursuant to clause 3.14.5B.

(2) The independent expert must call for submissions from all relevant Referred Affected Participants, Referred Market Customers, Referred Market Suspension Compensation Claimants and Referred Directed Participants after publishing the draft report and delivering the draft assessment under subparagraph (c)(1).

(3) Before the publication of the final report and delivery of the final assessment pursuant to subparagraph (c)(4), the independent expert must:

(i) if requested to do so by a Referred Affected Participant, Referred Market Customer, Referred Market Suspension Compensation Claimant or Referred Directed Participant, within 15 business days of the publication of the draft report and draft assessment, meet with representatives of the Referred Affected Participant, Referred Market Customer, Referred Market Suspension Compensation Claimant or Directed Participant to discuss any queries it has in relation to the draft report or draft assessment as appropriate; and

(ii) take into consideration, any further written submissions made by a Referred Affected Participant, Referred Market Customer, Referred Market Suspension Compensation Claimant or Referred Directed Participant in relation to the draft report or draft assessment, as the case may be, if the independent expert receives
those submissions within 15 business days of the publication of the draft report and draft assessment.

(4) The independent expert must in accordance with the intervention settlement timetable:

(i) prepare and publish a final report;

(ii) prepare and deliver his or her final assessment of the amounts payable or receivable by the relevant party pursuant to clause 3.12.2(a), 3.14.5B or 3.15.7B, as the case may be; and

(iii) deliver to AEMO a final tax invoice for the services rendered by the independent expert and a copy of all final assessments issued pursuant to subparagraph (c)(4)(ii).

(5) A report prepared under subparagraphs (c)(1)(i) and (c)(4)(i) must not disclose confidential information.

(6) If the independent expert requires further information than that contained in a written submission made by the Referred Affected Participant, Referred Market Customer, Referred Market Suspension Compensation Claimant or Referred Directed Participant under clause 3.12.2(f), 3.14.5B(a) or 3.15.7B(a), the independent expert may advise the relevant party in writing of the information required.

(7) If the relevant party has not provided that information to the independent expert within 10 business days of the date of the request for further information, then the independent expert, acting reasonably, is entitled to make such assumptions concerning that information as he or she thinks appropriate.

(8) The independent expert must enter into, and deliver, a confidentiality deed for the benefit of each Referred Affected Participant, Referred Market Customer, Referred Market Suspension Compensation Claimant and Referred Directed Participant in a form developed by AEMO pursuant to paragraph (e).

(d) A final report and a final assessment of an independent expert prepared in accordance with subparagraph (c)(4) is final and binding.

(e) AEMO must in accordance with the Rules consultation procedures prepare and publish a confidentiality deed for the purposes of this clause 3.12.3.

3.12A Mandatory restrictions

3.12A.1 Restriction offers

(a) AEMO must develop, and may vary from time to time, in accordance with the Rules consultation procedures a mandatory restrictions trading system. The trading system must include:

(1) procedures for the acquisition by AEMO of capacity the subject of restriction offers;
the standard terms and conditions upon which AEMO shall accept a restriction offer;

(3) the criteria to be applied by AEMO in the appointment of an appropriately qualified independent expert for the purposes of clause 3.12A.7(g)(ii); and

(4) procedures for the rebidding and dispatch of capacity the subject of an accepted restriction offer.

(b) The restriction offer procedures must take into account the following principles:

(1) AEMO may accept a restriction offer for all or part of the capacity of a scheduled generating unit or scheduled network service, as recorded in the bid and offer validation data for that scheduled generating unit or scheduled network service.

(2) AEMO must use its reasonable endeavours to acquire capacity from valid restriction offers or to terminate in whole or part an accepted restriction offer in a manner that minimises the estimated restriction shortfall amount.

(3) AEMO may at any time terminate an accepted restriction offer in whole or in part by providing 4 hours notice to the relevant Scheduled Generator or Scheduled Network Service Provider that an accepted restriction offer is so terminated.

(4) The submission of restriction offers must be made in the form and by the means set out in procedures developed and published by AEMO for the purpose of the submission of restriction offers.

(5) If a restriction offer is made in accordance with the restriction offer procedures, AEMO must make available to the parties who submitted the restriction offer the following information without delay:

(i) acknowledgment of receipt of a valid restriction offer; and

(ii) notification detailing why a restriction offer is invalid, if appropriate.

(6) If any details contained within a restriction offer are inconsistent with the bid and offer validation data provided by the relevant party then AEMO has the right to reject that restriction offer as invalid.

(7) A valid restriction offer must set out for each trading interval of a trading day:

(i) the price offered in $/MWh or as otherwise permitted by the restriction offer procedures; and

(ii) MW amount for that trading interval being offered.

(8) AEMO must only accept restriction offers from Scheduled Generators and Scheduled Network Service Providers with a connection point
located in the region in which mandatory restrictions apply or are proposed to apply.

(c) The standard terms and conditions developed by AEMO pursuant to clause 3.12A.1(a)(2) must take into account the following principles:

(1) All capacity the subject of the restriction offer must be available for immediate dispatch in the central dispatch process at all times.

(2) An accepted restriction offer is binding and may only be revoked or varied if the Scheduled Generator or Scheduled Network Service Provider notifies AEMO in accordance with the restriction offer procedures of a revocation or variation. Immediately upon receipt of such notification AEMO must amend the accepted restriction offer to reduce the capacity of the accepted restriction offer by the notified capacity. Such capacity must not be dispatched by AEMO pursuant to a dispatch offer for such capacity during the remainder of the trading day in which the accepted restriction offer was revoked or varied in accordance with this clause 3.12A.1(c) provided that such capacity may be re-offered as a restriction offer.

(3) A restriction offer may be amended or revoked in accordance with the restriction offer procedures at any time prior to it becoming an accepted restriction offer.

### 3.12A.2 Mandatory restrictions schedule

(a) AEMO must, within 4 hours of receipt of a formal written notice from a Jurisdictional System Security Coordinator advising that the relevant participating jurisdiction proposes to invoke mandatory restrictions:

(1) in consultation with such participating jurisdiction, and in accordance with any procedures developed with that participating jurisdiction, estimate the effect in MW of the mandatory restrictions on the region's demand for each trading interval of the next trading day of the proposed mandatory restriction period; and

(2) prepare and deliver to the Jurisdictional System Security Coordinator a schedule of capacity for each trading interval of the next trading day of the proposed mandatory restriction period which is approximately equal to the estimated reduction in regional demand due to the mandatory restrictions net of all scheduled loads in that region.

(b) AEMO must regularly in conjunction with the relevant Jurisdictional System Security Coordinator review the current mandatory restriction schedule and when appropriate prepare and deliver to the Jurisdictional System Security Coordinator a revised schedule of capacity for each trading interval of that trading day which is approximately equal to the revised estimated reduction in regional demand due to the mandatory restrictions net of all scheduled loads in that region.

(c) AEMO may only publish a mandatory restriction schedule and an amended mandatory restriction schedule upon receipt of a formal written notice
approving the mandatory restriction schedule from the relevant Jurisdictional System Security Coordinator.

3.12A.3 Acquisition of capacity

(a) AEMO must immediately upon publication of a mandatory restriction schedule or an amended mandatory restriction schedule use its reasonable endeavours to acquire, in accordance with the restriction offer procedures, capacity to meet the mandatory restriction schedule or amended mandatory restriction schedule as the case may be.

(b) AEMO must terminate in accordance with the restriction offer procedures such number of accepted restriction offers, in whole or in part, so that the total capacity of existing accepted restriction offers as far as practicable equals the amended mandatory restriction schedule.

3.12A.4 Rebid of capacity under restriction offers

In each dispatch interval when mandatory restrictions apply, each scheduled generating unit or scheduled network service the subject of an accepted restriction offer with respect to that dispatch interval must rebid the total capacity the subject of such restriction offer by varying the respective dispatch offers or network dispatch offers in accordance with the procedures developed pursuant to clause 3.12A.1(a)(4).

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

3.12A.5 Dispatch of restriction offers

(a) In a dispatch interval AEMO may only dispatch the capacity of a scheduled generating unit or scheduled network service in accordance with the procedures for the rebidding and dispatch of capacity the subject of an accepted restriction offer developed by AEMO in consultation with Registered Participants. Such procedures must as far as reasonably practical incorporate the following principles:

(i) dispatch of accepted restriction offers only after all the capacity of scheduled loads, scheduled generating units and scheduled network services contained in valid dispatch offers and dispatch bids have been dispatched;

(ii) recognise any requirement for advance notice or action for generators to operate at minimum generation, provide advance notice to loads or obtain capacity of market network services that are or may become the subject of a AEMO intervention event;

(iii) be consistent with the price of accepted restriction offers in accordance with clause 3.12A.6; and

(iv) minimise the restriction shortfall amount.
(b) Notwithstanding the provisions of this clause 3.12A.5, at no time is **AEMO** required to dispatch the capacity of a **Scheduled Generator** or **Scheduled Network Service Provider** the subject of an accepted restriction offer if such dispatch would prevent **AEMO** from meeting its obligations for system security.

### 3.12A.6 Pricing during a restriction price trading interval

During a mandatory restriction period, dispatch prices must be determined by the central dispatch process based on dispatch offers, dispatch bids and network dispatch offers in accordance with clause 3.9.2, provided that **AEMO** must calculate the dispatch price as if the dispatch offer price for all capacity the subject of an accepted restriction offer was the maximum price permitted by clause 3.8.6(c) and 3.8.6A(i) notwithstanding any other provision of the **Rules**.

### 3.12A.7 Determination of funding restriction shortfalls

(a) **AEMO** is entitled to the trading amount received by **Scheduled Generators** and **Scheduled Network Service Providers** from the dispatch of capacity the subject of an accepted restriction offer in accordance with 3.15.10B.

(b) **AEMO** must, as soon as reasonably practicable following the end of a mandatory restriction period, calculate:

(i) the aggregate amount payable to **AEMO** pursuant to clause 3.12A.7(a) from all accepted restriction offers in that mandatory restriction period;

(ii) the aggregate amount payable by **AEMO** pursuant to all accepted restriction offers in that mandatory restriction period; and

(iii) the sum of the amount determined under clause 3.12A.7(b)(i) less the amount determined under clause 3.12A.7(b)(ii) (the restriction shortfall amount).

(b1) The maximum amount payable to a **Scheduled Generator** or **Market Participant** for any accepted restriction offer of that **Scheduled Generator** or **Market Participant** during a mandatory restriction period is the aggregate of the maximum possible spot price for each trading interval within the mandatory restriction period, being the market price cap or an administered price cap as the case may be, multiplied by the capacity of the accepted restriction offer in MWh for each corresponding trading interval.

(c) Notwithstanding any other provisions of the **Rules**, the absolute value of the restriction shortfall amount must not exceed the sum of the maximum possible spot price for a trading interval, being the market price cap or an administered price cap as the case may be, multiplied by the aggregate of the capacity of all accepted restriction offers in MWh for that trading interval for all trading intervals in the mandatory restriction period.

(d) Notwithstanding any other provision of the **Rules**, if the restriction shortfall amount is capped pursuant to clause 3.12A.7(c) and the restriction shortfall amount calculated pursuant to clause 3.12A.7 is a negative number, then the amount payable by **AEMO** pursuant to each accepted restriction offer is to be reduced pro-rata until clause 3.12A.7(c) is satisfied.
(e) If the restriction shortfall amount is a negative number, Market Customers in the relevant region must pay to AEMO an amount determined in accordance with clause 3.12A.7(f) or 3.12A.7(g).

**Note**

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(f) If the restriction shortfall amount is between minus $100,000 and $0, then each Market Customer in the relevant region must pay to AEMO an amount determined in accordance with the following formula:

\[
MCP = RSA \times \frac{(AGE)}{(AAGE)}
\]

Where:

MCP is the amount payable by a Market Customer in accordance with this clause 3.12A.7(f).

RSA is the restriction shortfall amount.

AGE is the adjusted gross energy of a Market Customer in that region for the mandatory restriction period expressed in MWh.

AAGE is the aggregate of the adjusted gross energy of all Market Customers in that region for the mandatory restriction period expressed in MWh.

(g) If the restriction shortfall amount is less than minus $100,000:

(i) each Market Customer in the relevant region must pay to AEMO an amount determined in accordance with the following formula:

\[
RCP = (RSA + IE) \times (RD/TRD)
\]

Where

RCP is the amount payable to AEMO by a Market Customer in that region following the cessation of the mandatory restriction period.

RSA is the restriction shortfall amount incurred by AEMO upon the cessation of the mandatory electricity restriction period.

RD is the Market Customer's restriction demand reduction.

TRD is the sum of RD for all Market Customers in the relevant region.

IE is the amount of the independent expert's final tax invoice delivered to AEMO in accordance with clause 3.12A.7(i)(11) plus any amounts payable by AEMO on behalf of the independent expert as determined by the dispute resolution panel established in accordance with clause 3.12A.7(m); and

(ii) AEMO must within 10 days of the end of a mandatory restriction period appoint an appropriately qualified independent expert as AEMO's agent...
to determine the restriction demand reduction claimed by each Market Customer in a region for the purposes of clause 3.12A.7(g).

(h) If the restriction shortfall amount is a positive number then AEMO must pay to Market Customers in the relevant region an amount equal to:

\[ RCRP = RSA \times \left( \frac{AGE}{AAGE} \right) \]

Where:

RCRP is the payment to be made by AEMO to Market Customers pursuant to this clause 3.12A.7.

RSA is the restriction shortfall amount.

AGE is the adjusted gross energy of a Market Customer in that region for the mandatory restriction period expressed in MWh.

AAGE is the aggregate of the adjusted gross energy of all Market Customers in that region for the mandatory restriction period expressed in MWh.

(i) When appointing the independent expert under clause 3.12A.7(g), AEMO must include as part of the independent expert’s terms of appointment the following requirements:

1. The independent expert must prepare a statement of the principles which the independent expert believes should be followed in determining the restriction demand reduction of Market Customers.

2. Within 5 business days of his or her appointment, the independent expert must provide AEMO with details of his or her estimated fees and costs.

3. Within 5 business days of his or her appointment, the independent expert must provide the statement prepared under clause 3.12A.7(i)(1) to all Market Customers in the relevant region and request that each Market Customer in the relevant region provide him or her with details of the restriction demand reduction claimed by that Market Customer and such additional information specified by the independent expert to fulfil its obligations.

4. The independent expert must offer to meet with and consult each Market Customer who may be liable to make a payment to AEMO pursuant to clause 3.12A.7(g).

5. The independent expert must within 30 business days of his or her appointment or such later date as approved by AEMO in its sole discretion:

   (i) publish a draft report; and

   (ii) provide each Market Customer in the relevant region with a draft statement.

6. The draft report must contain:
(i) the restriction shortfall amount based upon the independent expert's estimated fees and costs; and

(ii) the methodology used by the independent expert in determining the restriction demand reduction of each Market Customer in a region.

The draft report must not contain details pertaining to individual Market Customers.

(7) A draft statement provided to a Market Customer must contain:

(i) the Market Customer's restriction demand reduction as determined by the independent expert;

(ii) the estimated amount payable by that Market Customer under clause 3.12A.7(g), based upon the independent expert's estimated fees and costs; and

(iii) information showing how the estimated amount referred to in clause 3.12A.7(i)(7)(ii) was calculated.

(8) The independent expert must within 50 business days of his or her appointment or such later date as approved by AEMO in its sole discretion make any necessary amendments to his or her draft report and draft statements following consultation with Market Customers, and:

(i) publish his or her final report; and

(ii) provide each Market Customer in the relevant region with a final statement.

(9) The independent expert's final report must contain the information set out in clause 3.12A.7(i)(6).

(10) A final statement provided to a Market Customer by the independent expert must contain the information set out in clause 3.12A.7(i)(7).

(11) The independent expert must provide AEMO with his or her final tax invoice for services rendered at the time of publication of the final report.

(i1) Each Market Customer must within 10 business days of the independent expert requesting information in accordance with clause 3.12A.7(i)(3) deliver to the independent expert all such information.

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(i2) The independent expert may request a Market Customer to provide further information that he or she requires to prepare either the draft or final report or a draft or final statement within 5 business days of the request being made.
(j) A Market Customer must not unreasonably withhold information sought by the independent expert and must use its reasonable endeavours to provide the independent expert with the information required within the relevant timeframe specified in this clause 3.12A.7.

(k) If a Market Customer has not provided the independent expert with information required under this clause 3.12A.7 within the specified time period, then the independent expert is entitled to make such assumptions concerning that information as he or she thinks appropriate.

(l) Subject to the review process specified in clause 3.12A.7(m), a determination made by an independent expert appointed under clause 3.12A.7(g) binds all Market Customers.

(m) Following the publication of the independent expert's final report, a Market Customer may request the Adviser to establish a dispute resolution panel to redetermine that Market Customer's restriction demand reduction only if the Market Customer reasonably believes that the independent expert's determination:

1. has incorrectly assessed the restriction demand reduction of that Market Customer by more than 10%; or

2. was made negligently or in bad faith.

(n) The determination of a dispute resolution panel established under clause 3.12A.7(m):

1. binds all Market Customers and each Market Customer must comply with a determination of the dispute resolution panel; and

   Note
   This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

2. may only order reimbursement of the reasonable fees and expenses incurred by a Market Customer in disputing the independent expert's determination and no other amounts.

(o) Any amounts determined by the dispute resolution panel as payable by AEMO on behalf of the independent expert for the reasonable fees and expenses incurred by a Market Customer in disputing the independent expert's determination must be included on the next statement provided under clauses 3.15.14 and 3.15.15.

3.12A.8 Cancellation of a mandatory restriction period

(a) At the cessation time designated in the mandatory restriction schedule, AEMO must:

1. immediately terminate all current restriction offers; and

2. publish a notice detailing the termination of all current restriction offers following the cancellation of the relevant mandatory restriction period.
3.12A.9 Review by AEMC

(a) The AEMC must, in accordance with clause 3.12A.9(b), conduct a review of the operation of the provisions applicable to mandatory restrictions including:

1. the integration of restriction offers and mandatory restrictions into the market; and

2. any other matters which the AEMC reasonably believes are relevant to the operation of clauses 3.12A.1 to 3.12A.8 and clause 3.15.10B.

(b) The review conducted by the AEMC in accordance with clause 3.12A.9(a) must:

1. include an analysis of:
   i. the accuracy of the forecast demand reduction due to restrictions and the impact any error had on the resulting spot price;
   ii. whether the impact on the spot price resulting from an error in the forecast demand reduction due to restrictions adversely affects one group of Scheduled Generators or Market Participants over another group;
   iii. the restriction offer prices for contracts accepted by AEMO in meeting the mandatory restriction schedule including a comparison with the expected revenue the capacity subject to the restriction offer would have earned in the spot market taking into account the circumstances in which restriction offers were made;

2. be conducted in accordance with the Rules consultation procedures; and

3. commence following the first application of the mandatory restrictions where the estimated effect in MW of mandatory restrictions on a region's demand met or exceeded 10% of that region's estimated demand for the same period.

3.13 Market Information

3.13.1 Provision of information

(a) In addition to any specific obligation or power of AEMO under the Rules to provide information, AEMO must make available to Scheduled Generators, Semi-Scheduled Generators and Market Participants on request any information concerning the operation of the market not defined by the AEMC or the Rules as confidential or commercially sensitive and may charge a fee reflecting the cost of providing any information under this clause 3.13.1(a).

(b) AEMO must make information available to the public on request in respect of the regional reference price at any regional reference node and, where requested and available, reasons for any significant movements in prices.

3.13.2 Systems and procedures

(a) Information must be provided to AEMO and by AEMO on the electronic communication system unless:
(1) the electronic communication system is partially or wholly unavailable, then information will, to the extent of that unavailability, be provided to AEMO and by AEMO by means of the backup procedures specified by AEMO from time to time; or

(2) otherwise approved by AEMO.

(b) Information must be provided by using the templates supplied in the electronic communication system unless otherwise approved by AEMO.

c) Where approved by AEMO, information may be transmitted to and from AEMO and the Scheduled Generator, Semi-Scheduled Generator or Market Participant concerned in any agreed format.

d) If possible, information provided to AEMO must be time stamped by AEMO on receipt by AEMO of the information by the electronic communication system and, if stamped, is deemed to be provided at the time indicated by the time stamp.

e) Information that is published by AEMO is deemed to be published when the information is placed on the market information bulletin board.

f) The market information bulletin board must be accessible by Scheduled Generators, Semi-Scheduled Generators and Market Participants via the electronic communication system subject to applicable security requirements.

g) Information published or notified to a Scheduled Generator, Semi-Scheduled Generator or Market Participant must be capable of being reviewed by that Generator or Market Participant and be capable of being downloaded from the market information bulletin board to the relevant Generator or Market Participant via the electronic communication system.

h) A Scheduled Generator, Semi-Scheduled Generator or Market Participant must notify AEMO of, and AEMO must publish, any changes to submitted information within the times prescribed in the timetable.

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(i) AEMO must make a copy of all changes to the data available to Scheduled Generators, Semi-Scheduled Generators and Market Participants for verification and resubmission by the relevant Generator or Market Participant as necessary.

(j) All revisions must be provided on the electronic communication system and in the same format as the original information.

(k) A Scheduled Generator, Semi-Scheduled Generator or Market Participant may withhold information from AEMO which must otherwise be provided under the Rules if:

(1) the information is of a confidential or commercially-sensitive nature and is not information of a kind that, in the reasonable opinion of the AEMC, is fundamental to the efficient operation of the market; or
(2) disclosure of the information would have the likely effect of causing detriment to the person required to provide it unless, in the reasonable opinion of the AEMC, the public benefit resulting from the provision of the information outweighs that detriment.

(l) Nothing in paragraph (k) allows a Scheduled Generator, Semi-Scheduled Generator or Market Participant to avoid providing information to AEMO under the Rules where that information is generally available.

3.13.3 Standing data

(a) AEMO must establish, maintain, update and publish:

(1) a list of all of the Scheduled Generators, Semi-Scheduled Generators and Market Participants and a list of all applications to become a Scheduled Generator, Semi-Scheduled Generator or Market Participant, including bid and offer validation data;

(2) a list of all of the Scheduled Generators, Semi-Scheduled Generators and Market Participants who will cease to be Scheduled Generators, Semi-Scheduled Generators or Market Participants and the time that each listed Scheduled Generator, Semi-Scheduled Generator or Market Participant will cease to be a Scheduled Generator, Semi-Scheduled Generator or Market Participant;

(2A) a list of the expected closure years and closure dates for all scheduled generating units and semi-scheduled generating units notified under clauses 2.2.1(e)(2A) and 2.10.1(c1), and make such information available on AEMO’s website;

(3) a list of all of the Scheduled Generators, Semi-Scheduled Generators and Market Participants who are or are going to be suspended and the time at which each listed Scheduled Generator, Semi-Scheduled Generator or Market Participant was suspended or will be suspended.

(b) All Scheduled Generators, Semi-Scheduled Generators and Market Participants must provide AEMO with the bid and offer validation data relevant to their scheduled loads, scheduled network services and generating units in accordance with schedule 3.1.

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(b1) In addition to the information provided to AEMO in paragraph (b), all Scheduled Generators, Semi-Scheduled Generators and Market Participants which have aggregated their scheduled loads, scheduled network services and generating units in accordance with clause 3.8.3, must provide AEMO with:

(i) the maximum generation of each individual scheduled generating unit, or semi-scheduled generating unit to which the individual scheduled generating unit, or semi-scheduled generating unit may be dispatched;
(ii) the number of individual scheduled loads that have been aggregated in accordance with clause 3.8.3; or

(iii) the number of scheduled network services that have been aggregated in accordance with clause 3.8.3.

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(c) All Scheduled Generators, Semi-Scheduled Generators and Market Participants will be required to provide AEMO with information as set out below:

(1) forecasts for connection points as prescribed in clause 5.11.1; and

(2) metering information for settlements purposes as prescribed in Chapter 7.

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(d) Network Service Providers are to maintain a register of data provided by Scheduled Generators, Semi-Scheduled Generators and Market Participants for planning and design purposes in accordance with schedule 5.7 of Chapter 5 and are to provide a copy of this register of data to AEMO on request and in a form specified by AEMO.

(e) Network Service Providers must, without delay, notify and provide AEMO with details of any additions or changes to the register of data described in clause 3.13.3(d).

(f) Each year, by a date to be specified by AEMO, Network Service Providers must provide AEMO with the following information:

(1) expected network capability under normal, outage and emergency conditions;

(2) electrical data sufficient to allow power system modelling under steady state and dynamic conditions, this data to be made available in hard copy and an acceptable industry standard electronic format approved by AEMO; and

(3) operating procedures and practices for network operation and maintenance.

(g) Network Service Providers must notify AEMO of any changes to the information provided under clause 3.13.3(f) as soon as practicable.

(h) Scheduled Generators, Semi-Scheduled Generators and Market Participants must notify AEMO of any changes to bid and offer validation data 6 weeks prior to the implementation of planned changes and without unreasonable delay in the event of unplanned changes.
(i) Network Service Providers must notify AEMO of any changes or additions to technical data one month prior to the implementation of planned changes and without unreasonable delay in the event of unplanned changes.

(j) AEMO must conduct an annual review of Scheduled Generator, Semi-Scheduled Generator and Market Participant bid and offer validation data in consultation with Scheduled Generators, Semi-Scheduled Generators and Market Participants and Scheduled Generators, Semi-Scheduled Generators and Market Participants must advise AEMO of any required changes to the data.

(k) A Registered Participant may request from AEMO:

(1) bid and offer validation data;

(2) information that is reasonably required by the Registered Participant to carry out power system simulation studies (including load flow and dynamic simulations) for planning and operational purposes; and

(3) operation and maintenance procedures and practices for transmission network or distribution network operation, developed for the purposes of schedule 5.1 sufficient to enable the Registered Participant to carry out power system modelling under normal, outage and emergency conditions.

(k1) AEMO must set out in the Power System Model Guidelines the circumstances in which AEMO will consider the information under paragraph (k)(2) to be reasonably required by a Registered Participant.

(l) If AEMO holds information requested under clause 3.13.3(k), AEMO must provide the requested information to the Registered Participant as soon as practicable, subject to the following requirements:

(1) If AEMO holds and is required under this paragraph (l) to provide a releasable user guide that AEMO received under clause S5.2.4(b)(8), AEMO must provide the releasable user guide to the Registered Participant in an unaltered form.

(2) If AEMO holds and is required under this paragraph (l) to provide a form of the model source code that AEMO received under clauses S5.2.4(b)(6) and S5.2.4(d) or from any other source, AEMO must provide that information:

(i) only in the form of, at AEMO's discretion:
(A) compiled information (such as, for example, compiled Fortran code in object code or dynamic link library (DLL) form);

(B) encrypted information; or

(C) a secured format agreed by the provider of the model source code,

unless AEMO has the written consent of the person who provided the information to AEMO to provide it in another form; and

(ii) in a form that can be interpreted by a software simulation product nominated by AEMO.

(3) Any information provided by AEMO under clause 3.13.3(l) to a Registered Participant must be treated as confidential information.

(11) AEMO may charge a fee, except where the information is requested by a Network Service Provider under clause 3.13.3(l5), to recover all reasonable costs incurred in providing information to a Registered Participant under this clause 3.13.3.

(12) For the purposes of clause 3.13.3(l), the provider of the model source code is:

(1) the Generator if the model source code was received from that Generator under clause S5.2.4(b)(6) or S5.2.4(d); or

(2) the person required under the Rules to register as a Generator in respect of a generating system comprised of generating units with a combined nameplate rating of 30 MW or more, if the model source code was received from that person under clause S5.2.4(b)(6) or S5.2.4(d); or

(3) the Generator, if the model source code was provided to AEMO by a Network Service Provider and that same Network Service Provider advises AEMO that the provider of the model source code is the Generator; or

(4) the relevant Network Service Provider, if that same Network Service Provider advises AEMO that the provider of the model source code is itself; or

(5) otherwise, the relevant Transmission Network Service Provider.

(13) If AEMO is required under clause 3.13.3(l) to provide information requested under clause 3.13.3(k)(2), AEMO may provide:

(1) historical information relating to the operating conditions of the power system;

(2) information and data provided to AEMO under clauses 3.13.3(f)(1) and 3.13.3(f)(3) and information of the same type provided under clause 3.13.3(g);
(3) network dynamic model parameter values obtained under clauses 3.13.3(f)(2) and 3.13.3(g);

(4) model parameter values and load flow data derived from a releasable user guide;

(5) a network model of the national grid, suitable for load flow and fault studies; and

(6) other technical data as listed in Schedules 5.5.3 and 5.5.4.

(14) Despite clause 3.13.3(l), AEMO must not provide information relating to plant that is the subject of an application to connect or a connection agreement, until the earlier of:

(1) the date when a connection agreement relating to that plant is executed; or

(2) three months before the proposed start of commissioning of that plant.

(15) Subject to clause 3.13.3(l6), if a Transmission Network Service Provider is responsible for provision of network limit advice relating to power system stability limits to AEMO under clause S5.1.2.3, AEMO must, on request from that Transmission Network Service Provider, provide all power system and generating system model information that is reasonably required for planning and operational purposes, if AEMO holds that information, including:

(1) functional block diagram information, including information provided to AEMO under clause S5.2.4(b)(5);

(2) generating unit, generating system and power system static and dynamic model information, including model parameters and parameter values; and

(3) information provided to AEMO in accordance with clause S5.2.4(a).

(16) If AEMO is required to provide information to a Transmission Network Service Provider under paragraph (15), this must not include:

(1) model source code provided to AEMO under clauses S5.2.4(b)(6) and S5.2.4(d), except as allowed under clause 3.13.3(l); and

(2) information relating to plant that is the subject of an application to connect until after the execution of the relevant connection agreement.

(17) Any information provided by AEMO under clause 3.13.3(l5) to a Transmission Network Service Provider must be treated as confidential information.

(m) Where special approvals or exemptions have been granted by AEMO, including approval to aggregate generating units, market network services, loads for central dispatch, or exemptions from central dispatch, details of such special arrangements must be published by AEMO.

(n) AEMO must determine and publish intra-regional loss factors in accordance with clause 3.6.2 by 1 April each year and whenever changes occur.
(o) Network Service Providers must advise AEMO of their distribution loss factors, duly authorised by the AER, and AEMO must publish such distribution loss factors in accordance with clause 3.6.3(i).

(p) AEMO must publish on a quarterly basis details of:

1. interconnector transfer capability; and
2. the discrepancy between interconnector transfer capability and the capacity of the relevant interconnector in the absence of outages on the relevant interconnector only,

for each day of the preceding quarter for all interconnectors.

(p1) AEMO must establish, maintain and publish a register which identifies:

1. the Registered Participant to whom any information is provided under clause 3.13.3(l); and
2. the date on which such information was provided.

(q) In relation to the declared transmission system of an adoptive jurisdiction:

1. AEMO must maintain the register referred to in paragraph (d); and
2. a declared transmission system operator must provide AEMO with information reasonably required by AEMO for maintaining the register and keeping it up to date.

3.13.3A Statement of opportunities

ESOO information

(a) By 31 August in each year, AEMO must prepare and publish at a reasonable charge to cover the cost of production, a statement of opportunities, including at least the following information for the subsequent 10 year period:

1. projections of aggregate MW demand and energy requirements for each region;
2. capabilities of existing generating units and generating units for which formal commitments have been made for construction or installation;
3. capabilities of proposed generating units for which formal commitments have not been made for construction or installation, to the extent it is reasonably practicable to do so;
4. planned plant retirements (including expected closure years and closure dates for any generating units in the subsequent 10 year period);
5. a summary of network capabilities and constraints based upon Transmission Annual Planning Reports; and
6. proposed network developments for which formal commitments have been made for construction or installation;
(7) proposed network developments for which formal commitments have not been made for construction or installation to the extent it is reasonably practicable to do so;

(8) the operational assumptions made by AEMO in relation to generating units and contracted demand side participation, including outage information and auxiliary supply information;

(9) operational and economic information about the market to assist planning by:

(i) Scheduled Generators, Semi-Scheduled Generators and Market Participants; and

(ii) potential Scheduled Generators, Semi-Scheduled Generators and Market Participants; and

(10) a reliability forecast for each region for the financial year in which the statement of opportunities is published on its website and the subsequent four financial years and an indicative reliability forecast for the remaining financial years.

Updates

(b) If after the publication of the most recent statement of opportunities, new information becomes available to AEMO relating to the matters set out in subparagraphs (a)(1) to (a)(8) that in AEMO’s reasonable opinion materially changes the statement of opportunities, AEMO must, as soon as practicable, publish that information in a descriptive form that is consistent with the statement of opportunities and, if it considers appropriate, publish on its website an updated reliability forecast in accordance with the Reliability Forecast Guidelines.

ESOO information requests

(c) AEMO may by written notice request a jurisdictional planning body to provide AEMO with information that AEMO requires for the preparation of a statement of opportunities and the jurisdictional planning body must comply with that notice.

(d) AEMO may, by written request, require provision of information relevant to the matters specified in paragraph (a) from Registered Participants that AEMO reasonably requires for the preparation of a statement of opportunities or an update under paragraph (b). A request for information must comply with the Reliability Forecast Guidelines.

(e) A Registered Participant must comply with an information request under paragraph (d) in accordance with the Reliability Forecast Guidelines.

(f) As soon as practicable after a Scheduled Generator, Semi-Scheduled Generator, Market Participant or Network Service Provider becomes aware of a material change to any information required for publication by AEMO under paragraph (a), that information must be provided to AEMO by that Scheduled Generator, Semi-Scheduled Generator, Market Participant or Network Service Provider.
(g) A Registered Participant must ensure that the information provided in response to an information request under paragraph (d) or under paragraph (f) is:

1. not false or misleading in a material particular;
2. in relation to information of a technical nature, is prepared in accordance with good electricity industry practice; and
3. represents the Registered Participant’s current intentions and best estimates.

ESOO reviews

(h) AEMO must, no less than annually, prepare and publish on its website information on:

1. the accuracy to date of the demand and supply forecasts, and any other inputs determined by AEMO to be material to reliability forecasts; and
2. any improvements made by AEMO or other relevant parties to the forecasting process that will apply to the next statement of opportunities, in accordance with the Reliability Forecast Guidelines (as applicable). Where availability of information makes comparisons to older statement of opportunities necessary, AEMO may include the statement of opportunities for the preceding 24 months.

(i) A jurisdictional planning body must provide assistance AEMO reasonably requests in connection with the preparation of a report under paragraph (h).

(j) In this clause:

**contracted demand side participation** has the meaning given in rule 3.7D.

### 3.13.4 Spot market

(a) Each week, in accordance with the timetable, AEMO must publish details of the outputs of the medium term PASA.

(b) The details to be published by AEMO under clause 3.13.4(a) must include the information specified in clause 3.7.2(f).

(c) Each day, in accordance with the timetable, AEMO must publish details of the outputs of the short term PASA for each trading interval covered.

(d) The details of the short term PASA published each day by AEMO under clause 3.13.4(c) must include the information specified in clause 3.7.3(h).

(e) Each day, in accordance with the timetable, AEMO must publish a half hourly pre-dispatch schedule for the period described in clause 3.8.20(a).

(f) Details of the pre-dispatch schedule to be published must include the following for each trading interval in the period covered:

1. forecasts of the most probable peak power system load plus required scheduled reserve for each region and for the total power system;
(2) forecasts of the most probable energy consumption for each region and for the total power system;

(3) forecast inter-regional loss factors;

(4) aggregate generating plant availability for each region and aggregate availability of each type of market ancillary service for each region;

(5) projected supply surpluses and deficits for each region, including shortages of scheduled reserve and projected market ancillary service surpluses and deficits for each region;

(5A) the aggregated MW allowance (if any) made by AEMO for generation from non-scheduled generating systems in each forecast:

(i) of the most probable peak power system load referred to in clause 3.13.4(f)(1);

(ii) referred to in clause 3.13.4(f)(2);

(iii) of aggregate generating plant availability referred to in clause 3.13.4(f)(4); and

(iv) of projected supply surpluses and deficits referred to in clause 3.13.4(f)(5) but not including shortages of scheduled reserve or projected market ancillary service surpluses and deficits for each region.

(5B) in respect of each forecast:

(i) of the most probable peak power system load referred to in clause 3.13.4(f)(1);

(ii) referred to in clause 3.13.4(f)(2);

(iii) of aggregate generating plant availability referred to in clause 3.13.4(f)(4); and

(iv) of projected supply surpluses and deficits referred to in clause 3.13.4(f)(5) but not including shortages of scheduled reserve or projected market ancillary service surpluses and deficits for each region,

a value that is the sum of that forecast and the relevant aggregated MW allowance (if any) referred to in clause 3.13.4(f)(5A); and

(6) identification and quantification of:

(i) where a projected supply deficit in one region can be supplemented by a surplus in a neighbouring region (dependent on forecast interconnector capacities) and the expected interconnector flow;

(ii) forecast interconnector transfer capabilities and the projected impact of any inter-network tests on those transfer capabilities; and
(iii) when and where network constraints may become binding on the dispatch of generation or load.

(g) Each day, in accordance with the timetable, AEMO must publish forecasts of spot prices and ancillary service prices at each regional reference node for each trading interval or dispatch interval (as applicable) of the period described in clause 3.8.20(a), with such forecasts being based on the pre-dispatch schedule information.

(h) Together with its forecast spot prices, AEMO must publish details of the expected sensitivity of the forecast spot prices to changes in the forecast load or generating unit availability.

(i) In accordance with the timetable or more often if there is a change in circumstances which in the opinion of AEMO results in a significant change in forecast spot price, or in any event no more than 3 hours after the previous such publication, AEMO must prepare and publish updated pre-dispatch schedules and spot price forecasts, including the details specified in clause 3.13.4(f).

(j) If AEMO considers there to be a significant change in a forecast spot price, AEMO must identify and publish the cause of such a change in terms of the aggregate supply and demand situation and any network constraints in or between the affected region(s).

(k) AEMO must specify and publish its criteria for a significant change in forecast spot price for the purposes of activating an update in the published forecasts.

(l) Within 5 minutes of each time AEMO runs the dispatch algorithm, AEMO must publish the dispatch price for each regional reference node calculated in accordance with clause 3.9.2 and the ancillary service price for each market ancillary service for each regional reference node calculated in accordance with clause 3.9.2A.

(m) Within 5 minutes of the conclusion of each trading interval, AEMO must publish the regional reference prices for each region for that trading interval.

(n) Each day, in accordance with the timetable, AEMO must publish the actual regional reference prices, ancillary service prices, regional and total interconnected system loads and energies, inter-regional loss factors and details of any network constraints for each trading interval in the previous trading day.

(n1) In accordance with the timetable, AEMO must publish the inter-regional flows.

(o) [Deleted]

(p) Each day, in accordance with the timetable, AEMO must publish details of final dispatch offers, dispatch bids and market ancillary service offers received and actual availabilities of generating units, scheduled network services, scheduled loads and market ancillary services for the previous trading day, including:
(1) the number and times at which rebids were made, and the reason provided by the Scheduled Generator, Semi-Scheduled Generator or Market Participant for each rebid under clause 3.8.22(c)(2);

(2) identification of the Scheduled Generator, Semi-Scheduled Generator or Market Participant submitting the dispatch bid, dispatch offer or market ancillary offer;

(3) the dispatch bid or dispatch offer prices;

(4) quantities for each trading interval;

(5) the ramp rate of each generating unit, scheduled load and scheduled network service as measured by AEMO's telemetry system;

(6) identification of trading intervals for which the plant was specified as being inflexible in accordance with clause 3.8.19 and the reasons provided by the Scheduled Generator, Semi-Scheduled Generator or Market Participant in accordance with clause 3.8.19(b)(1);

(7) in respect of a semi-scheduled generating unit, the availability of that generating unit specified in the relevant unconstrained intermittent generation forecast for each dispatch interval; and

(8) in respect of semi-scheduled generating units, the aggregate of the availability of the semi-scheduled generating units referred to in subparagraph (7) in respect of each region for each dispatch interval.

(q) Each day, in accordance with the timetable, AEMO must publish details of:

(1) dispatched generation, dispatched network service or dispatched load for each scheduled generating unit, semi-scheduled generating unit, scheduled network service and scheduled load respectively in each trading interval and dispatch interval; and

(2) for each semi-scheduled generating unit in each trading interval and dispatch interval, whether or not a condition for setting a semi-dispatch interval applied,

for the previous trading day.

(r) In accordance with the timetable, AEMO must publish details of:

(1) actual generation for each scheduled generating unit, semi-scheduled generating unit and non-scheduled generating unit or non-scheduled generating system;

(2) actual network service for each scheduled network service; and

(3) actual load for each scheduled load.

(s) Where AEMO publish details as referred to in clause 3.13.4(r), the requirement to publish applies only to data available to AEMO.

(t) AEMO may, in publishing the details referred to in clause 3.13.4(s), publish aggregated information of actual generation for non-scheduled generating
units or non-scheduled generating systems that have a nameplate rating that is less than 30 MW.

(u) Each time AEMO runs the dispatch algorithm it must, within 5 minutes, publish for the relevant dispatch interval:

1. details of any MW allowance made by AEMO for generation from non-scheduled generating systems in its forecast regional demand;
2. for each regional reference node the sum of the actual generation for each non-scheduled generating unit or non-scheduled generating system; and
3. for each regional reference node, a value that is the sum of the regional demand value used by AEMO in its dispatch algorithm to calculate the dispatch price referred to in clause 3.13.4(l) and the sum of the actual generation referred to in clause 3.13.4(u)(2).

(v) Where AEMO publishes the information referred to in clause 3.13.4(u), the requirement for AEMO to publish applies only to data available to AEMO.

(w) Each day, in accordance with the timetable, AEMO must publish details of any operational irregularities arising on the previous trading day including, for example, any circumstances in which there was prima facie evidence of a failure to follow dispatch instructions.

(x) Each trading interval, AEMO must, for each regional reference node, publish the demand for that trading interval, both inclusive and exclusive of the aggregate actual generation from non-scheduled generating systems.

(y) In accordance with the timetable and no more than 3 hours after the last such notification, AEMO must notify electronically on a confidential basis each Semi-Scheduled Generator of the unconstrained intermittent generation forecast for its semi-scheduled generating units that was taken into account for each trading interval of the last pre-dispatch schedule published by AEMO under paragraph (e).

(z) At intervals to be determined by AEMO under rule 3.7A(e), AEMO must, in accordance with the timetable, publish updates to the congestion information resource.

3.13.4A Market ancillary services

(a) AEMO must each day, in accordance with the timetable, publish a forecast of the requirements for each type of market ancillary service for each region for each trading interval during the period described in clause 3.8.20(a).

(b) AEMO must publish information describing the key factors which determine the requirement for each type of market ancillary service and how they impact on forecast requirements.

(b1) AEMO must publish annually the actual quantities and types of market ancillary services.
(c) *AEMO* must *publish* information detailing any significant changes to the forecast requirement for any *market ancillary service* previously *published* under clause 3.13.4A(a), as soon as reasonably practicable after becoming aware of that information.

### 3.13.5 Ancillary services contracting by AEMO

(a) *AEMO* must *publish* annually the costs of all of its operations associated with its acquisition of *market ancillary services* and *non-market ancillary services*.

(b) *AEMO* must *publish* annually the quantities and types of *NSCAS* covered under existing *ancillary services agreements*.

(c) Information *published* under paragraph (b) must include a breakdown of the actual costs and quantities relating to each *facility* contracted under *ancillary services agreements*.

### 3.13.5A Settlements residue auctions

(a) If *AEMO* conducts an *auction* under rule 3.18, *AEMO* must, as soon as practicable thereafter, make available to all *Registered Participants* a report outlining:

1. the *auction* clearing prices;
2. all bids (but not the name of any bidder); and
3. the proceeds of each such *auction*.

(b) *AEMO* must, as soon as practicable after the *final statements* for a *billing period* have been given to *Market Participants* under clause 3.15.15, make available to all *Registered Participants* a report setting out:

1. the total *settlements residue*;
2. the amount of *settlements residue* attributable to each *directional interconnector* (including the amount paid pursuant to the *jurisdictional derogations* in Chapter 9); and
3. the amount of *settlements residue* attributable to *intra-regional loss factors* for each *region*, for that *billing period*.

(c) *AEMO* may provide copies of its reports under clauses 3.13.5A(a) and (b) to persons other than *Registered Participants*, and may charge a fee for doing so to cover an appropriate share of the costs of preparing the report.

### 3.13.6 [Deleted]

### 3.13.6A Report by AEMO

(a) *AEMO* must, as soon as reasonably practicable after issuing a *direction*, *publish* a report outlining:

1. the circumstances giving rise to the need for the *direction*;
(2) the basis on which it determined the latest time for that direction and on what basis that it determined that a market response would not have avoided the need for the direction;

(3) details of the changes in dispatch outcomes due to the direction;

(4) the processes implemented by AEMO to issue the direction;

(5) if applicable, the basis upon which AEMO did not follow any or all of the processes set out in rule 4.8 either in whole or in part prior to the issuance of the direction;

(6) if applicable, the basis upon which AEMO considered it impractical to set spot prices and ancillary service prices in accordance with clause 3.9.3(b);

(7) details of the adequacy and effectiveness of responses to inquiries made by AEMO under clause 4.8.5A(d); and

(8) information regarding any notification by a Registered Participant that it will not be able to comply with a direction under clause 4.8.9(d).

(b) As soon as reasonably practicable after AEMO has, in accordance with clause 3.15.10C, included the amounts arising from a direction in a settlement statement provided under clause 3.15.15, AEMO must publish details of:

(1) the compensation recovery amount arising from the direction as calculated under clause 3.15.8(a) for the period of the direction;

(2) details of the calculation of the regional benefit determined under clause 3.15.8(b1); and

(3) a breakdown of the compensation recovery amount by each category of Registered Participant, as determined by AEMO, in each region.

### 3.13.7 Monitoring of significant variation between forecast and actual prices by AER

(a) The AER must, after consulting with the AEMC, specify and make available to Registered Participants and the public, criteria which the AER will use to determine whether there is a significant variation between the spot price forecast published by AEMO in accordance with clause 3.13.4 and the actual spot price in any trading interval. The AER must, in accordance with these criteria, monitor in each trading interval whether any such significant variation has occurred.

(b) The AER must prepare and publish a report in respect of each three month period commencing on 1 January, 1 April, 1 July and 1 October in each year. The report must:

(1) be published no later than 4 weeks after the end of each three month period;

(2) identify and review each occasion when, in accordance with the criteria specified under clause 3.13.7(a), the AER considers that a significant price variation has occurred;
(3) state why the AER considers that the significant price variation occurred;

(4) be available to members of the public on request; and

(5) be provided to the AEMC.

c) The ACCC or the AEMC may request the AER to report to it on a particular market outcome. If the ACCC or the AEMC makes a request of this type, the AER may provide a report on that market outcome. The report must review the market outcome raised by the ACCC or the AEMC (as the case may be) and state why the AER considers that the market outcome occurred.

d) The AER must, within 40 business days of the end of a week in which the spot price exceeded $5,000/MWh in a trading interval or trading intervals, prepare and publish a report which must for each trading interval in which the spot price exceeded $5,000/MWh in that week:

(1) describe the significant factors that contributed to the spot price exceeding $5,000/MWh, including the withdrawal of generation capacity and network availability;

(2) assess whether rebidding pursuant to clause 3.8.22 contributed to the spot price exceeding $5,000/MWh; and

(3) identify the marginal scheduled generating units and semi-scheduled generating units for the dispatch intervals in the relevant trading interval and all scheduled generating units and semi-scheduled generating units for which any dispatch offer for the trading interval was equal to or greater than $5,000/MWh and compare these dispatch offers to relevant dispatch offers in previous trading intervals.

e) Where

(1) prices at a regional reference node for a market ancillary service over a period significantly exceed the relevant spot price for energy; and

(2) prices for that market ancillary service exceed $5,000 for a number of trading intervals within that period,

the AER must prepare and publish a report which:

(3) describes the significant factors that contributed to the ancillary service prices exceeding $5,000/MWh;

(4) identifies any linkages between spot prices in the energy market and ancillary service prices contributing to the occurrence; and

(5) assesses whether rebidding pursuant to clause 3.8.22 contributed to prices exceeding $5,000/MWh.

3.13.8 Public information

(a) AEMO must publish on a daily basis the following information for the previous trading day:

(1) regional reference price by trading interval;
(2) power system load for each region referred to the regional reference node by trading interval;

(3) regional electricity consumption in MWh by trading interval;

(4) inter-regional power flows by trading interval; and

(5) network constraints by trading interval.

(b) All market information that AEMO is required to publish in accordance with the Rules shall also be made available by AEMO to persons other than Registered Participants using the electronic communications system on the fee basis described in clause 8.7.6. AEMO may make the market information available to persons other than Registered Participants using a mechanism other than the market information bulletin board on the fee basis described in clause 8.7.6, so long as that information is also available on the market information bulletin board.

(c) AEMO must make available for purchase by any party the statement of opportunities from the date of publication of such statement.

(d) AEMO must retain all information provided to it under the Rules for at least 6 years in whatever form it deems appropriate for reasonably easy access.

3.13.9 [Deleted]

3.13.10 Market auditor

(a) AEMO must appoint one or more market auditors to carry out reviews of such matters as AEMO considers appropriate which must include (but need not be limited to) a review of:

(1) the calculations and allocations performed by the metering system and settlements system;

(2) the billing and information systems;

(3) the scheduling and dispatch processes;

(4) the processes for software management;

(5) the AEMO procedures and their compliance with the Rules.

(b) AEMO must ensure that the market auditor carries out the reviews to be carried out under clause 3.13.10(a) no less than annually.

(c) A market auditor shall be an independent person.

(d) A market auditor must report in writing to AEMO. AEMO must, after receiving the report, either:

(1) approve the report, and any recommendations made in it, by noting such approval on the report or in a paper attached to the report; or

(2) prepare a separate report setting out the matters dealt with in the report which AEMO approves and those matters which AEMO does not approve and setting out AEMO's reasons for that view.
AEMO must publish any report received from the market auditor together with the material mentioned in clause 3.13.10(d).

3.13.11 [Deleted]

3.13.12 NMI Standing Data

Note:

Clause 3.13.12 only applies in a participating jurisdiction that has not applied the NERL as a law of that jurisdiction. In a participating jurisdiction that has applied the NERL, the scheme developed by AEMO under clause 3.13.12A supersedes clause 3.13.12 and clause 3.13.12 is revoked (see clause 3.13.12A(d)).

(a) The authority responsible for administering the jurisdictional electricity legislation in for each participating jurisdiction may provide AEMO with a Jurisdictional NMI Standing Data schedule setting out the categories of NMI Standing Data which:

1. Registered Participants are required by the participating jurisdiction's legislation or licensing requirements to provide to AEMO in relation to connection points in that participating jurisdiction; and
2. AEMO must make available to Market Customers, or a class of Market Customers, on request pursuant to its disclosure obligations under clauses 3.13.12(d) and (e).

Any such schedule must contain the matters set out in clause 3.13.12(c).

(b) A responsible authority may from time to time amend the Jurisdictional NMI Standing Data schedule in respect of the relevant participating jurisdiction, which amendments must be consistent with the matters set out in clause 3.13.12(c), and must promptly provide the amended schedule to AEMO.

(c) A valid Jurisdictional NMI Standing Data schedule must contain the following items:

1. a specification of the categories of NMI Standing Data which AEMO must provide to Market Customers, or a specified class of Market Customers, on request, pursuant to its disclosure obligations under clauses 3.13.12(d) and (e), in respect of connection points in the relevant participating jurisdiction;
2. details of the Jurisdictional NMI Standing Data suppliers, including which Registered Participants are required to provide that data in respect of particular connection points within that participating jurisdiction;
3. the timetable which the relevant participating jurisdiction will implement to ensure Jurisdictional NMI Standing Data suppliers supply NMI Standing Data in respect of connection points in that participating jurisdiction to AEMO;
4. the criteria which AEMO must use to identify whether AEMO must disclose NMI Standing Data for connection points in that participating jurisdiction;
jurisdiction to particular Market Customers, pursuant to its disclosure obligations under clauses 3.13.12(d) and (e);

(5) the purposes connected with the facilitation of the wholesale electricity market for which the Market Customer may use NMI Standing Data;

(6) any additional information or criteria as may be determined by the authority responsible for administering the jurisdictional electricity legislation as necessary or appropriate in relation to the obligations of Jurisdictional NMI Standing Data suppliers and the release by AEMO of NMI Standing Data for connection points in that participating jurisdiction.

(d) AEMO must:

(1) publish the Jurisdictional NMI Standing Data schedules and any amendments to those schedules provided to it by the responsible authorities under clauses 3.13.12(a) and (b); and

(2) subject to clause 3.13.12(e), make available to Market Customers on request NMI Standing Data within the relevant categories in respect of connection points in a participating jurisdiction described in the Jurisdictional NMI Standing Data schedule for that participating jurisdiction.

(e) AEMO must only provide NMI Standing Data under this clause 3.13.12 to a Market Customer:

(1) that is a Market Customer or a member of a class of Market Customers fitting the criteria stated in the relevant Jurisdictional NMI Standing Data schedule as being entitled to receive that data;

(2) in accordance with the relevant valid Jurisdictional NMI Standing Data schedule; and

(3) for the purposes described in clause 3.13.12(g).

(f) Each Registered Participant which is a Jurisdictional NMI Standing Data supplier must provide the NMI Standing Data to AEMO which it is required to provide in accordance with the relevant Jurisdictional NMI Standing Data schedule, if any such Jurisdictional NMI Standing Data schedule has been provided to AEMO under clause 3.13.12(a):

(1) at no charge and in the format reasonably required by AEMO; and

(2) after having first done whatever may be required or otherwise necessary under any applicable privacy legislation (including if appropriate making relevant disclosures or obtaining relevant consents from end-use customers) taking into account that AEMO will use and disclose the NMI Standing Data in accordance with the Rules.

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)
(g) Market Customers must only use NMI Standing Data provided to it by AEMO under this clause 3.13.12 for the purposes permitted by the relevant Jurisdictional NMI Standing Data schedule.

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(h) Where a responsible authority has provided AEMO with a Jurisdictional NMI Standing Data schedule for the relevant participating jurisdiction and a Registered Participant which is a Jurisdictional NMI Standing Data supplier fails to provide AEMO with NMI Standing Data in accordance with clause 3.13.12(f) and AEMO becomes aware of that failure, then:

(1) AEMO must advise the Registered Participant that, in its opinion, the Registered Participant is failing to comply with clause 3.13.12(f);

(2) if the Registered Participant fails to provide AEMO with the NMI Standing Data within 5 business days of the notice provided under clause 3.13.12(h)(1), AEMO must notify the AER and the relevant responsible authority of the failure and the failure by the Registered Participant to provide the NMI Standing Data is to be dealt with by the responsible authority under the relevant participating jurisdiction's legislation or licensing requirements unless the responsible authority notifies AEMO otherwise in accordance with clause 3.13.12(h)(3); and

(3) if, after receiving a notice from AEMO under clause 3.13.12(h)(2), the responsible authority notifies AEMO that the relevant participating jurisdiction's legislation or licensing requirements do not contain a regime which empowers the responsible authority to compel the Registered Participant to provide the NMI Standing Data to AEMO, AEMO must notify the AER of the failure by the Registered Participant to provide the NMI Standing Data under clause 3.13.12(f).

(i) Where a responsible authority has provided AEMO with a Jurisdictional NMI Standing Data schedule for the relevant participating jurisdiction and a Market Customer, that has been provided with NMI Standing Data by AEMO under clause 3.13.12(d) in accordance with that schedule, fails to use that NMI Standing Data in accordance with clause 3.13.12(g), and AEMO becomes aware of that failure, then:

(1) AEMO must advise the Market Customer that, in its opinion, the Market Customer is failing to comply with clause 3.13.12(g);

(2) if the Market Customer does not remedy the failure within 5 business days of the notice provided under clause 3.13.12(i)(1), AEMO must notify the relevant responsible authority of the failure and the failure by the Market Customer to use the NMI Standing Data in accordance with this clause 3.13.12 is to be dealt with by the responsible authority under the relevant participating jurisdiction's legislation or licensing requirements unless the responsible authority notifies AEMO otherwise in accordance with clause 3.13.12(i)(3); and
if, after receiving a notice from AEMO under clause 3.13.12(i)(2), the responsible authority notifies AEMO that the relevant participating jurisdiction's legislation or licensing requirements do not contain a regime which empowers the responsible authority to regulate the use of the NMI Standing Data by a Market Customer, AEMO must notify the AER of the failure by the Market Customer to use the NMI Standing Data in accordance with clause 3.13.12(g).

(j) AEMO must if requested by a responsible authority:

(1) develop a regime for monitoring and reporting to the responsible authority on requests received by AEMO to provide NMI Standing Data to Market Customers for connections points in the relevant participating jurisdiction, in consultation with the responsible authority; and

(2) provide information to the responsible authority in accordance with the monitoring and reporting regime developed under this clause 3.13.12(j).

(k) Nothing in this clause 3.13.12:

(1) requires AEMO to make available NMI Standing Data if that NMI Standing Data has not been provided to AEMO;

(2) requires AEMO to make available NMI Standing Data where the collection, use or disclosure of that information by AEMO would breach applicable privacy laws;

(3) precludes AEMO from providing NMI Standing Data to a Registered Participant where the provision of that information is required to give effect to other provisions of the Rules;

(4) precludes AEMO from disclosing confidential information in the circumstances in which the disclosure of confidential information is permitted under the National Electricity Law or these Rules; and

(5) requires AEMO to provide information which its software systems cannot provide without modification.

3.13.12A NMI Standing Data Schedule

Note:

Clause 3.13.12A was inserted in the Rules by the National Electricity Amendment (National Energy Retail Law) Rule 2012. Clause 3.13.12A only applies in a participating jurisdiction that has applied the NERL as a law of that jurisdiction. In a participating jurisdiction that has not applied the NERL clause 3.13.12 continues to apply.

(a) AEMO must, in consultation with the responsible authorities for participating jurisdictions, Registered Participants, and other interested persons, develop a scheme for an NMI standing data schedule (the NMI Standing Data Schedule).

(b) In developing the scheme, AEMO must have regard to the Jurisdictional NMI Standing Data schedules.

(c) The proposed scheme must include provisions dealing with:
the obligations of Registered Participants and others to provide information for inclusion in the Schedule; and

(2) the rights of Registered Participants and others to have access to the Schedule; and

(3) amendment of the Schedule.

(d) The scheme supersedes clause 3.13.12 and, on the date it takes effect, that clause is revoked.

(e) AEMO must publish a notice of its adoption of the scheme in the South Australian Government Gazette:

(1) setting out the provisions of the scheme; and

(2) fixing a date for its commencement.

(f) The scheme takes effect on the date fixed under paragraph (e)(2).

3.13.13 Inter-network tests

(a) AEMO must publish the test program for an inter-network test as soon as practicable after determining it under clause 5.7.7(r).

(b) If AEMO amends the test program for an inter-network test it must publish details of the amendment.

(c) If AEMO proposes to conduct an inter-network test it must publish the approximate time of the test, giving as much notice as is reasonably practicable.

(d) If the time of an inter-network test is changed, AEMO must publish details of the change.

3.13.14 Carbon Dioxide Equivalent Intensity Index

Carbon dioxide equivalent intensity index procedures

(a) AEMO must develop, review and amend carbon dioxide equivalent intensity index procedures in consultation with Registered Participants and such other persons as AEMO thinks appropriate, in accordance with the Rules consultation procedures and paragraphs (b), (c) and (e)

(a1) For the purposes of this clause, reference to a market generating unit is not taken to include a small generating unit.

(b) The carbon dioxide equivalent intensity index procedures must include:

(1) the methodology for calculating the carbon dioxide equivalent intensity index and any supplementary carbon dioxide equivalent intensity indicators;

(2) where relevant, any assumptions used to calculate the carbon dioxide equivalent intensity index and any supplementary carbon dioxide equivalent intensity indicators;
the form of the emission factors for the scheduled generating units and market generating units included in the calculation of the carbon dioxide equivalent intensity index and any supplementary carbon dioxide equivalent intensity indicators;

(4) the methodology for estimating an emission factor where the data on the emission factor for a scheduled generating unit or market generating unit included in the calculation of the carbon dioxide equivalent intensity index and any supplementary carbon dioxide equivalent intensity indicators is not publicly available;

(5) the form of the energy measurements (in MWh) for the scheduled generating units and market generating units included in the calculation of the carbon dioxide equivalent intensity index and any supplementary carbon dioxide equivalent intensity indicators;

(6) the time interval for updating and publishing the carbon dioxide equivalent intensity index and any supplementary carbon dioxide equivalent intensity indicators; and

(7) the time interval for conducting a review of the emission factors under paragraph (j).

(c) In developing the carbon dioxide equivalent intensity index procedures, AEMO must:

(1) ensure that the methodology used to calculate the carbon dioxide equivalent intensity index under paragraph (b)(1) represents the volume weighted average of the carbon dioxide equivalent greenhouse gas emissions from all the scheduled generating units and market generating units included in the calculation of the carbon dioxide equivalent intensity index for the time interval described in paragraph (b)(6);

(2) ensure that the methodology used to calculate any supplementary carbon dioxide equivalent intensity indicators under paragraph (b)(1) represents the volume weighted average of the carbon dioxide equivalent greenhouse gas emissions from all the scheduled generating units and market generating units included in the calculation of the supplementary carbon dioxide equivalent intensity indicators for the time interval described in paragraph (b)(6);

(3) use reasonable endeavours to obtain the data used to calculate the carbon dioxide equivalent intensity index and any supplementary carbon dioxide equivalent intensity indicators from reliable sources; and

(4) have regard to the methodology for determining emission factors under the Australian Government’s National Greenhouse and Energy Reporting System when determining the methodology for estimating the emission factors under paragraph (b)(4).
(d) AEMO must publish the first carbon dioxide equivalent intensity index procedures by no later than 22 July 2011 and such procedures must be available at all times after this date.

(e) AEMO must conduct a review of the carbon dioxide equivalent intensity index procedures at least once every 3 years after the first carbon dioxide equivalent intensity index procedures are published.

Carbon dioxide equivalent intensity index and supplementary carbon dioxide equivalent intensity indicators

(f) AEMO must calculate, update and publish a carbon dioxide equivalent intensity index for the National Electricity Market in accordance with the carbon dioxide equivalent intensity index procedures and this clause 3.13.14.

(g) The first carbon dioxide equivalent intensity index must be published as soon as practicable after the first carbon dioxide equivalent intensity index procedures are published under paragraph (d).

(h) If AEMO elects to publish any supplementary carbon dioxide equivalent intensity indicators, AEMO must calculate, update and publish the supplementary carbon dioxide equivalent intensity indicators in accordance with the carbon dioxide equivalent intensity index procedures.

(i) At the same time as it publishes the first carbon dioxide equivalent intensity index under paragraph (g), AEMO must publish a table which lists:

1. all the scheduled generating units and market generating units included in the calculation of the carbon dioxide equivalent intensity index; and

2. for each scheduled generating unit or market generating unit referred to in subparagraph (1), the emission factor and the source of that information.

(j) AEMO must conduct a review of the emission factors for the scheduled generating units and market generating units included in the calculation of the carbon dioxide equivalent intensity index and any supplementary carbon dioxide equivalent intensity indicators in accordance with the carbon dioxide equivalent intensity index procedures to determine whether the emission factors have changed since the last update of the emission factors.

(k) As soon as practicable after a review under paragraph (j), AEMO must update the carbon dioxide equivalent intensity index and where appropriate, any supplementary carbon dioxide equivalent intensity indicators with any new emission factors, if the emission factor for any scheduled generating units or market generating units included in the calculation of the carbon dioxide equivalent intensity index and any supplementary carbon dioxide equivalent intensity indicators has changed since the last update of the emission factors.

(l) In addition to the obligation under paragraph (k), AEMO must update the carbon dioxide equivalent intensity index and where appropriate, any supplementary carbon dioxide equivalent intensity indicators with any new emission factors as soon as practicable if:
AEMO is advised that the emission factor for any scheduled generating units or market generating units included in the calculation of the carbon dioxide equivalent intensity index and any supplementary carbon dioxide equivalent intensity indicators has changed since the last update of the emission factors; and

(2) the data on the emission factor is publicly available and, in AEMO’s opinion, is from a reliable source.

(m) If:

(1) a generating unit is classified as a scheduled generating unit or market generating unit under Chapter 2 after the first carbon dioxide equivalent intensity index is published under paragraph (g); and

(2) data for that generating unit is not included in the calculation of the carbon dioxide equivalent intensity index,

then AEMO must as soon as practicable update the carbon dioxide equivalent intensity index to include data for that generating unit.

(n) For the avoidance of doubt, in updating the carbon dioxide equivalent intensity index under paragraph (m), AEMO may use the methodology for estimating an emission factor under the carbon dioxide equivalent intensity index procedures to calculate the carbon dioxide equivalent intensity index if the emission factor for any generating units described in paragraph (m) is not publicly available.

(o) AEMO must, as soon as practicable after it updates the carbon dioxide equivalent intensity index and any supplementary carbon dioxide equivalent intensity indicators under paragraphs (k) to (m):

(1) update the table described in paragraph (i) with the new emission factor(s), the source of that information and where appropriate, any new scheduled generating units or market generating units included in the calculation of the carbon dioxide equivalent intensity index; and

(2) publish the table.

(p) AEMO must amend the timetable to include the time interval in which it must publish the carbon dioxide equivalent intensity index under the carbon dioxide equivalent intensity index procedures (as amended under this clause 3.13.14).

(q) Despite clause 3.4.3(b), AEMO may amend the timetable under paragraph (p) without following the Rules consultation procedures.

3.14 Administered Price Cap and Market Suspension

3.14.1 Cumulative Price Threshold and Administered Price Cap

(a) The administered price cap for each region is $300/MWh.

(b) The administered floor price for each region to apply to spot prices is the negative of the value of the administered price cap.
(c) The *cumulative price threshold* for each *financial year* is the dollar amount calculated by the *AEMC* under paragraph (d).

**Note**

The current value of the *cumulative price threshold* is set out in a schedule of reliability settings published on the AEMC’s website www.aemc.gov.au

(d) By 28 February of each year (commencing 2012), the *AEMC* must calculate the *cumulative price threshold* to apply on and from 1 July of that year in accordance with paragraphs (e) and (f) and publish its calculation on its website as part of a schedule of reliability settings.

(e) Subject to paragraph (f), the *AEMC* must calculate the *cumulative price threshold* using the following formula:

\[
CPT^x = BV^{CPT} \times \left( \frac{Q_1^c + Q_2^c + Q_3^c + Q_4^c}{Q_1^b + Q_2^b + Q_3^b + Q_4^b} \right)
\]

Where:

- CPT is the *cumulative price threshold* in dollars;
- \(x\) is the *financial year* for which the *cumulative price threshold* is being calculated;
- \(BV^{CPT}\) is $187,500 (being the value of the *cumulative price threshold* prior to 1 July 2012);
- Q1 to Q4 are the values of the Reliability Settings Index for each of the four quarters of years c and b (as the case may be) as at five months before the start of year x;
- Reliability Settings Index is the All groups, Australia CPI found at Index Numbers, All groups, Australia, in Tables 1 and 2 of the Consumer Price Index, Australia published by the Australian Bureau of Statistics for the relevant quarter, except where that index ceases to be published or is substantially changed, in which case the Reliability Settings Index will be such other index as is determined by the *AEMC* as suitable;
- c is the calendar year commencing 18 months before the start of year x; and
- b is calendar year 2010.

(f) If the value calculated by the *AEMC* under paragraph (e) is:

1. not in whole hundreds of dollars, then the *cumulative price threshold* for year x will be the value calculated under paragraph (e) rounded to the nearest $100;
2. less than the *cumulative price threshold* applied under this clause 3.14.1 for the preceding *financial year* (year x-1), then the *cumulative price threshold* for year x will be the value of the *cumulative price threshold* for year x-1.
3.14.2 Application of Administered Price Cap

(a) [Deleted]

(b) AEMO must immediately notify all Market Participants of the commencement and closing of an administered price period under rule 3.14.

(c) Each of the following periods is an administered price period in a region:

(1) a trading interval, where the sum of the spot prices in the previous 336 trading intervals, calculated as if this clause did not apply, exceeds the cumulative price threshold;

(1A) a dispatch interval, where the sum of the ancillary service prices for a market ancillary service in the previous 2016 dispatch intervals, calculated as if this clause did not apply, exceeds 6 times the cumulative price threshold;

(2) a trading interval in a trading day in which a prior trading interval is an administered price period;

(2A) a dispatch interval in a trading day in which a prior dispatch interval is an administered price period; or

(2B) a dispatch interval within a trading interval that is an administered price period.

(3) [Deleted]

(d) During an administered price period the procedures for PASA, dispatch, spot price and ancillary service price determination are to continue in accordance with the provisions of the Rules.

(d1) If, within an administered price period triggered because of clause 3.14.2(c)(1) or (2) in relation to energy, the dispatch price for the region identified in clause 3.14.2(c) calculated as if this clause 3.14.2(d1) did not apply:

(1) exceeds the administered price cap, then AEMO must set the dispatch price to the administered price cap; or

(2) is less than the administered floor price, AEMO must set the dispatch price to the administered floor price.

(d2) If within an administered price period an ancillary service price for any market ancillary service for the region identified in clause 3.14.2(c) calculated as if this clause 3.14.2(d2) did not apply exceeds the administered price cap, then AEMO must set that ancillary service price to the administered price cap.

(e) If during an administered price period the dispatch price:

(1) [Deleted]

(2) at any regional reference node is set to the administered price cap under clause 3.14.2(d1)(1), then dispatch prices at all other regional reference nodes connected by a regulated interconnector or regulated...
interconnectors that have an energy flow towards that regional reference node must not exceed the administered price cap divided by the average loss factor that applies for energy flow in that direction for that dispatch interval and determined in accordance with clause 3.14.2(e)(5).

(3) [Deleted]

(4) at any regional reference node is set to the administered floor price under clause 3.14.2(d1)(2), then dispatch prices at all other regional reference nodes connected by a regulated interconnector or regulated interconnectors that have an energy flow away from that regional reference node must be equal to or greater than the administered floor price multiplied by the average loss factor that applies for energy flow in that direction for that dispatch interval and determined in accordance with clause 3.14.2(e)(5).

(5) AEMO must determine the average loss factors applicable to clause 3.14.2(e)(2) and 3.14.2(e)(4) by reference to the inter-regional loss factor equations relating to the relevant regulated interconnector.

3.14.3 Conditions for suspension of the spot market

(a) Subject to clause 3.14.3(b), AEMO may declare the spot market to be suspended in a region when in respect of that region:

(1) the power system has collapsed to a black system;

(2) AEMO has been directed by a participating jurisdiction to suspend the market or operate all or part of the power system in a manner contrary to the provisions of the Rules following the formal declaration by that participating jurisdiction of a state of emergency under its emergency services or equivalent legislation; or

(3) AEMO determines that it is necessary to suspend the spot market in a region because it has become impossible to operate the spot market in accordance with the provisions of the Rules.

(a1) [Deleted]

(b) AEMO must not suspend the spot market solely because:

(1) dispatch prices have reached the market price cap;

(1A) spot prices have reached the market floor price;

(2) AEMO has issued a direction; or

(3) AEMO has otherwise intervened in the market under rule 3.12.

(c) AEMO must conduct reviews of each occasion when it suspended the spot market in order to assess the adequacy of the provision and response of facilities or services, and the appropriateness of actions taken to restore or maintain power system security.

(d) The report of the review carried out in accordance with paragraph (c) must:

(1) for each market suspension pricing schedule period, include details of:
(i) the payments made to each Market Suspension Compensation Claimant under the market suspension pricing schedule;

(ii) the compensation paid (if any) to each Market Suspension Compensation Claimant under clauses 3.14.5A, 3.14.5B and 3.15.7B; and

(iii) the share of compensation costs payable by each Market Customer in each suspended region and each region in which dispatch prices were affected in accordance with clause 3.14.5(f), as determined by AEMO under clause 3.15.8A; and

(2) be made available to Registered Participants and the public as soon as practicable after the conclusion of the market suspension.

(e) A Registered Participant must co-operate in any such review conducted by AEMO (including making available relevant records and information).

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(f) A Registered Participant must provide to AEMO such information relating to the performance of its equipment during and after a suspension of the spot market as AEMO reasonably requires for the purposes of analysing or reporting on that suspension.

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(g) AEMO must provide to a Registered Participant such information or reports relating to the performance of that Registered Participant's equipment during a suspension of the spot market as that Registered Participant reasonably requests and in relation to which AEMO is required to conduct a review under this clause 3.14.3.

3.14.4 Declaration of market suspension

(a) The spot market in a region can only be suspended by a declaration by AEMO in the circumstances described in clause 3.14.3(a), and AEMO must publish that declaration without delay.

(b) [Deleted]

(c) The spot market in a region is deemed to be suspended at the start of the dispatch interval in which AEMO makes a declaration that the spot market is suspended.

(d) Following a declaration by AEMO under clause 3.14.3(a), the spot market is to remain suspended in the relevant region until AEMO declares and informs all Registered Participants:
(1) that spot market operation is to resume in accordance with this Chapter 3; and

(2) of the time at which the spot market is to resume.

(e) If AEMO declares that the spot market is suspended:

(1) AEMO may issue directions to Registered Participants in accordance with clause 4.8.9; and

(2) dispatch prices and ancillary service prices in the relevant region are to be set by AEMO in accordance with clause 3.14.5 until the time at which the spot market is resumed.

(f) AEMO must within 10 business days following the day on which, in accordance with the notice given by AEMO under paragraph (d), the spot market resumed, commence an investigation of that spot market suspension.

(g) The investigation must examine and report on the reason for the suspension and the effect that the suspension had on the operation of the spot market. AEMO must make a copy of the report available to Registered Participants and the public as soon as it is practicable to do so.

3.14.5 Pricing during market suspension

(a) Subject to paragraph (b), if the spot market is suspended in a region then central dispatch and the determination of dispatch prices, spot prices and ancillary service prices in the suspended region are to continue in accordance with rules 3.8 and 3.9.

(b) If, in AEMO's reasonable opinion, it is not practicable to operate central dispatch and determine dispatch prices and ancillary service prices in a suspended region in accordance with rules 3.8 and 3.9, AEMO must set dispatch prices and ancillary service prices for the suspended region at the prices applicable to the relevant dispatch interval in the current market suspension pricing schedule developed and published in accordance with paragraph (e).

(c) Dispatch prices and ancillary service prices determined in accordance with paragraph (b) for a suspended region:

(1) continue to be subject to the application of clause 3.14.2(d1) and clause 3.14.2(d2) in respect of administered price periods, and are to be adjusted (where applicable) in accordance with clause 3.14.2(e);

(2) are not to be adjusted in the circumstances set out in clause 3.9.2(e)(1) or clauses 3.9.2(e)(2) and 3.9.3;

(3) are not subject to review under clause 3.9.2B; and

(4) are not subject to clause 3.12A.6.

(d) If the dispatch prices and ancillary service prices in a suspended region are being determined in accordance with paragraph (b), they must continue to be determined in accordance with that paragraph until the earlier of:
(1) the time that the spot market is no longer suspended in the relevant region; and

(2) if AEMO declared the spot market to be suspended for the reason set out in clause 3.14.3(a)(1) or (3), the time that, in AEMO's reasonable opinion, it is practicable to resume central dispatch and the determination of dispatch prices and ancillary service prices in the suspended region in accordance with rules 3.8 and 3.9; and

(3) if AEMO declared the spot market to be suspended for the reason set out in clause 3.14.3(a)(2), the time that, in AEMO's reasonable opinion, it is practicable to resume central dispatch and the determination of dispatch prices and ancillary service prices in the suspended region in accordance with rules 3.8 and 3.9, provided that the participating jurisdiction that directed AEMO under clause 3.14.3(a)(2) has agreed to the resumption of central dispatch and the determination of dispatch prices and ancillary service prices in the suspended region in accordance with rules 3.8 and 3.9.

(e) AEMO must:

(1) develop in accordance with the Rules consultation procedures a methodology to be used by AEMO (market suspension pricing methodology) to prepare and update schedules containing reasonable estimates of typical market prices during the periods to which the schedules relate (market suspension pricing schedule);

(2) develop and update the market suspension pricing schedule in accordance with the market suspension pricing methodology, to be used during any period in which the spot market is suspended; and

(3) publish the market suspension pricing methodology promptly after it has been developed and publish the market suspension pricing schedule at least 14 days prior to the first day to which the schedule relates.

(f) If a dispatch price is set in accordance with paragraph (b) at a regional reference node (suspension node), then dispatch prices at all other regional reference nodes connected by one or more regulated interconnectors that have a net energy flow towards the suspension node must not exceed the dispatch price in the suspended region divided by the average loss factor that applies for energy flow in that direction for that dispatch interval.

(g) Paragraph (f) does not apply to a dispatch price at another regional reference node that has been replaced in accordance with clause 3.9.2B or where clause 3.8.21(b) applies.

(h) AEMO must use reasonable endeavours to ensure that any adjustments required to dispatch prices so that they do not exceed the limits set by paragraph (f) are finalised as soon as practicable but in any event by the end of the next business day following the day on which the spot market in the region ceased to be suspended.
3.14.5A Payment of compensation due to market suspension pricing schedule periods

Compensation - objective

(a) The objective for the payment of compensation under this clause 3.14.5A and clause 3.14.5B is to maintain the incentive for:

(1) Scheduled Generators to supply energy; and

(2) Ancillary Service Providers to supply market ancillary services, during market suspension pricing schedule periods.

Payment to Market Suspension Compensation Claimants

(b) Subject to paragraph (c), AEMO must pay compensation to Market Suspension Compensation Claimants calculated in accordance with paragraph (d) and clause 3.14.5B (as the case may be).

(c) For the purpose of clauses 3.15.8A and 3.15.10C, the amount of compensation due to a Market Suspension Compensation Claimant pursuant to paragraph (b) must include interest on that amount computed at the average bank bill rate beginning on the day on which payment was required to be made under clauses 3.15.16 and 3.15.17 in respect of the final statement for the billing period in which the market suspension pricing schedule period occurred and ending on the day on which payment is required to be made pursuant to clause 3.15.10C.

(d) Subject to clause 3.14.5B, the compensation payable to each Market Suspension Compensation Claimant is to be determined in accordance with the formula set out below:

\[ C = CO - RE \]

where:

\[ C \] = the amount of compensation the Market Suspension Compensation Claimant is entitled to receive.

\[ CO \] = the costs the Market Suspension Compensation Claimant is deemed to have incurred during the market suspension pricing schedule period, to be determined in accordance with the formula set out below:

\[ CO = (SOG \times BVG) + (MWE \times BVAS) \]

where:
and where C is a negative number, it will be deemed to be zero.

(e) The benchmark value for generation (BVG) at paragraph (d) is to be determined in accordance with the formula set out below and the market suspension compensation methodology developed under paragraph (h):

\[ \text{BVG} = \text{BC}_{(av)} \times 1.15 \]

where:

\[ \text{BC}_{(av)} = \] the capacity-weighted average of the benchmark costs (BC) (in $/MWh) of all Scheduled Generators in the same class of Generator and same region as the Market Suspension Compensation Claimant, with each benchmark cost to be determined in accordance with the formula below:

\[ \text{BC} = (\text{FC} \times E) + \text{VOC} \]

where:

\[ \text{FC} = \] the fuel cost (in $/GJ) for the relevant Generator.
In each case, the above inputs (FC, E and VOC) are to be the same as the equivalent NTNDP inputs. If there is no equivalent NTNDP input for "FC" or "E", it will be deemed to be 1. If there is no equivalent NTNDP input for "VOC", it will be deemed to be zero.

(f) The benchmark value for market ancillary services (BVAS) at paragraph (d) is to be determined in accordance with the formula below:

\[ BVG = BC_{(av)} \times \left( \frac{0.15}{n} \right) \]

where:

- \( BC_{(av)} \) has the same meaning as in paragraph (e) above.
- \( n \) means the number of trading intervals within a one hour period.

(g)\( AEMO \) must, in accordance with the intervention settlement timetable, advise each Market Suspension Compensation Claimant in writing:

1. whether the Market Suspension Compensation Claimant is entitled to receive compensation pursuant to paragraph (b); and
2. if so, the amount of compensation payable, as calculated in accordance with paragraph (d).

**Market suspension compensation methodology and schedule of benchmark values**

(h) \( AEMO \) must develop, publish and make available on its website a methodology (market suspension compensation methodology) that specifies:

1. the classes of Scheduled Generator and Ancillary Service Provider to be used for the purpose of calculating benchmark values;
2. the approach to be adopted by \( AEMO \) in calculating the benchmark values for each class of Scheduled Generator and Ancillary Service Provider in each region, including determining the equivalent NTNDP inputs for the purpose of the calculation in paragraph (e); and
3. \( AEMO \)'s administrative fees associated with a claim for compensation under clause 3.14.5B or the manner in which those fees are to be determined.
(i) AEMO may amend the *market suspension compensation methodology* from time to time in accordance with the *Rules consultation procedures*. Notwithstanding this paragraph (i), AEMO may make minor and administrative amendments to the *market suspension compensation methodology* without complying with the *Rules consultation procedures*.

(j) AEMO must develop a schedule of benchmark values (*schedule of benchmark values*) for each class of *Scheduled Generator* and *Ancillary Service Provider* in each *region*, calculated in accordance with the formula set out in paragraphs (e) and (f), and using (where appropriate) the equivalent NTNDP inputs.

(k) AEMO must *publish* and make available on its website an updated schedule of benchmark values no later than one month after each publication of the NTNDP.

### 3.14.5B Claims for additional compensation due to market suspension pricing schedule periods

(a) Subject to paragraphs (b) and (c), *Market Suspension Compensation Claimants* may, within 15 *business days* of receipt of the notice referred to in clause 3.14.5A(g), make a written submission to AEMO claiming an amount equal to the amount by which its direct costs of supplying *energy or market ancillary services* during the *market suspension pricing schedule period* exceed the sum of:

1. any compensation payable to the *Market Suspension Compensation Claimant* under clause 3.14.5A with respect to that *market suspension pricing schedule period*;
2. the *Market Suspension Compensation Claimant*’s "RE" as calculated under clause 3.14.5A(d); and
3. any other compensation which the *Market Suspension Compensation Claimant* has received or is entitled to receive in connection with the relevant *generating unit* supplying *energy or market ancillary services* during that *market suspension pricing schedule period*.

(b) Where a *Market Suspension Compensation Claimant* is a *Directed Participant* with respect to any *dispatch interval* during a *market suspension pricing schedule period*, such *Market Suspension Compensation Claimant*:

1. is entitled to make a claim under clause 3.15.7B(a); and
2. is not entitled to make a claim under this clause 3.14.5B.

(c) A written submission made by a *Market Suspension Compensation Claimant* pursuant to paragraph (a) must:

1. itemise each component of the claim;
2. contain sufficient data and information to substantiate each component of the claim; and
(3) be signed by an authorised officer of the Market Suspension Compensation Claimant certifying that the written submission is true and correct.

(d) For the purposes of paragraph (a), the direct costs incurred by the Market Suspension Compensation Claimant means:

(1) fuel costs in connection with the relevant generating unit;

(2) incremental maintenance costs in connection with the relevant generating unit;

(3) incremental manning costs in connection with the relevant generating unit; and

(4) other direct costs reasonably incurred in connection with the relevant generating unit, where such costs are incurred to enable the generating unit to supply energy or market ancillary services during the market suspension pricing schedule period.

(e) AEMO may recover from a Market Suspension Compensation Claimant an administrative fee to assist in recouping some of the costs incurred in carrying out its functions under this clause 3.14.5B (which costs may include fees for services rendered by an independent expert under clause 3.12.3). The administrative fees will be determined in accordance with the market suspension compensation methodology developed pursuant to clause 3.14.5A(h).

(f) AEMO:

(1) may (but is not required to) refer a claim by a Market Suspension Compensation Claimant under paragraph (a) to an independent expert to determine such claim in accordance with clause 3.12.3 where the claim is equal to or greater than $50,000; and

(2) must determine in its sole discretion if any claims by a Market Suspension Compensation Claimant made under paragraph (a) and not referred to an independent expert under subparagraph (f)(1) are reasonable, and if so, pay the amount claimed in accordance with clause 3.15.10C, in accordance with the intervention settlement timetable.

(g) Where AEMO considers a claim made by a Market Suspension Compensation Claimant under paragraph (a) to be unreasonable, it must:

(1) advise the Market Suspension Compensation Claimant of its determination in writing, setting out its reasons; and

(2) refer the claim to an independent expert to determine the claim in accordance with clause 3.12.3.
3.14.6 Compensation due to the application of an administered price cap or administered floor price

Eligibility for compensation

(a) For the purposes of this clause 3.14.6:

compensation guidelines means the guidelines made by the AEMC under paragraph (e).

direct costs means the costs directly incurred by the claimant due to a price limit event

direct cost only claim means a claim made under paragraph (i) that does not include a claim for opportunity costs.

eligibility period means the period starting at the beginning of the first trading interval in which the price limit event occurs in a trading day and ending at the end of the final dispatch interval of the last trading interval of that trading day.

opportunity costs means the value of opportunities foregone by the claimant due to the price limit event as defined in the compensation guidelines.

price limit event means:

(1) for Scheduled Generators and Non-Scheduled Generators:
   (i) the dispatch price for a dispatch interval is set by the administered price cap during an administered price period; or
   (ii) the dispatch price for a dispatch interval is set as a result of the application of clause 3.14.2(e)(2);

(2) for Market Participants in respect of scheduled load:
   (i) the dispatch price for a dispatch interval is set by the administered floor price during an administered price period; or
   (ii) the dispatch price for a dispatch interval is set as a result of the application of clause 3.14.2(e)(4); and

(3) for Scheduled Network Service Providers:
   (i) the dispatch price for a dispatch interval for a region towards which the Scheduled Network Service Provider is transporting power is set by the administered price cap during an administered price period; or
   (ii) the dispatch price for a dispatch interval for a region towards which the Scheduled Network Service Provider is transporting power is set as a result of the application of clause 3.14.2(e)(2).

(4) for Ancillary Service Providers, in respect of an ancillary service generating unit or an ancillary service load, the ancillary service price for a dispatch interval is set by the administered price cap during an administered price period.
relevant region means a region in which the dispatch price or ancillary service price (as relevant) is set by the price limit event.

total costs means the direct costs and opportunity costs determined in accordance with the compensation guidelines provided that, in the case of a claimant that is a Market Network Service Provider, the total costs must be the costs incurred due to transporting power towards the relevant region and must not include costs incurred, or revenues earned, due to transporting power away from the relevant region.

(b) If a price limit event occurs then the following are eligible to claim Registered Participants compensation for the eligibility period:

(1) a Scheduled Generator or Non-Scheduled Generator in the relevant region;

(2) a Market Participant in respect of a scheduled load that has been dispatched in the relevant region in that eligibility period;

(3) a Scheduled Network Service Provider that transported power towards the relevant region; and

(4) an Ancillary Service Provider that provided market ancillary services in the relevant region in the eligibility period,

provided that the relevant claimant has incurred total costs during the eligibility period that exceed the total revenue it received from the spot market during that period.

Compensation - objective and basis

(c) The objective of the payment of compensation under this clause 3.14.6 is to maintain the incentive for:

(1) Scheduled Generators, Non-Scheduled Generators and Scheduled Network Service Providers to supply energy;

(2) Ancillary Service Providers to supply ancillary services; and

(3) Market Participants with scheduled load to consume energy,

during price limit events.

(d) The amount of compensation payable in respect of a claim under this clause 3.14.6 must be based on direct costs and opportunity costs.

Compensation guidelines

(e) The AEMC must, in accordance with the transmission consultation procedures, develop and publish guidelines (compensation guidelines) that are consistent with paragraphs (c) and (d) and that:

(1) define the types of opportunity costs in relation to which a person can make a claim under this clause 3.14.6;
(2) outline the methodology to be used to calculate the amount of any compensation payable in respect of a claim under this clause, including the methodology for calculating direct costs and opportunity costs; and

(3) set out the information AEMO and a claimant must provide to enable the AEMC to make a determination as to compensation under this clause 3.14.6.

(f) The AEMC must ensure that there are compensation guidelines in place at all times.

Note:
The first compensation guidelines were made on 30 June 2009 and have been amended from time to time since that date. The current version of the compensation guidelines are available on the AEMC’s website www.aemc.gov.au.

(g) The AEMC may from time to time, in accordance with the transmission consultation procedures, amend or replace the compensation guidelines.

Process for making a claim

(h) A person who is eligible under paragraph (b) may make a claim for compensation by providing the AEMC and AEMO with written notice of its claim in the form required by the compensation guidelines.

(i) A claim under paragraph (h) must be made within 5 business days of notification by AEMO that an administered price period has ended.

Initial steps on receipt of claim

(j) Following its receipt of a notice under paragraph (h), the AEMC must promptly:

(1) publish a notice on its website stating that it has received a claim under paragraph (h). The notice must:
   (i) provide information on the general nature of the claim;
   (ii) state whether or not the claim is a direct cost only claim; and
   (iii) state that the AEMC will publish a notice when it commences formal assessment of the claim; and

(2) seek such information from the claimant that the AEMC reasonably considers is required to enable assessment of the claim including, in the case of a claim other than a direct cost only claim, the methodology used by the claimant to determine its opportunity costs.

Formal commencement of claim

(k) As soon as practicable after the AEMC is reasonably satisfied that it has sufficient information from the claimant to assess its claim, the AEMC must publish a notice on its website that it has formally commenced its assessment of the claim specifying whether or not the claim is a direct cost only claim.
Determination of direct cost only claims

(l) Not later than 45 *business days* after publication of the notice under paragraph (k) in respect of a direct cost only claim, the *AEMC* must *publish* its final decision as to:

1. whether compensation should be paid by *AEMO* in relation to the claim; and
2. if so, the amount of compensation that should be paid.

(m) Before making its final decision under paragraph (l) the *AEMC* must consult with the claimant.

(n) In making its final decision under paragraph (l), the *AEMC* must apply the compensation guidelines unless it is satisfied that there are compelling reasons not to do so.

Determination of claims other than direct cost only claims

(o) In relation to a claim other than a direct cost only claim, the *AEMC* must, as soon as practicable but not later than 35 *business days* after publication of the notice under paragraph (k) *publish*:

1. the claimant's proposed methodology for determining the claimant's opportunity costs;
2. the methodology the *AEMC* proposes to use in determining the claimant's opportunity costs (*draft opportunity cost methodology*); and
3. an invitation for written submissions to be made to the *AEMC* on the draft opportunity cost methodology by a date not less than 20 *business days* after the invitation is made (*submission closing date*).

(p) Any person may make a written submission to the *AEMC* on the draft opportunity cost methodology by the submission closing date.

(q) Not later than 35 *business days* after the submission closing date the *AEMC* must *publish* its final decision on:

1. the methodology it will use in determining the claimant's opportunity costs; and
2. whether compensation should be paid by *AEMO* in relation to the claim; and
3. if so, the amount of compensation that should be paid.

(r) Before making its decision on the matters referred to in paragraph (q), the *AEMC* must consult with the claimant.

(s) In making its final decision as to the matters referred to in paragraph (q), the *AEMC* must:

1. take into account the submissions made in response to the invitation to in subparagraph (o)(3); and
(2) apply the compensation guidelines unless it is satisfied that there are compelling reasons not to do so.

Extensions of time

(t) Despite anything to the contrary in this clause 3.14.6, the AEMC may extend a period of time specified in this clause if it considers the extension reasonably necessary to enable it to properly assess the claim because of the complexity or difficulty of assessing the claim or because of a material change in circumstances.

(u) The AEMC must publish any extension of time made under paragraph (t).

Costs of claim

(v) The AEMC may recover from a claimant for compensation under this clause any costs that are incurred by the AEMC in carrying out their functions under this clause in respect of that claim. For this purpose the AEMC may require the claimant to pay all or a proportion of those costs to the AEMC prior to the claim being considered or determined.

3.15 Settlements

3.15.1 Settlements management by AEMO

(a) AEMO must facilitate the billing and settlement of payments due in respect of transactions under this Chapter 3, including:

(1) spot market transactions;
(2) reallocation transactions;
(3) negative settlements residue under clause 3.6.5; and
(4) under clause 3.15.6A.

(b) AEMO must determine the Participant fees and the Market Participants must pay them to AEMO in accordance with the provisions of rule 2.11.

3.15.2 Electronic funds transfer

(a) AEMO must ensure that an electronic funds transfer (EFT) facility is provided and made available for all Market Participants for the purposes of settlements and the collection and payment of all market fees.

(b) Unless otherwise authorised by AEMO, all Market Participants must use the EFT facility provided by AEMO under clause 3.15.2(a) for the payment and receipt of amounts due in respect of transactions and the payment of market fees.

(c) In establishing the EFT facility in accordance with clause 3.15.2(a) AEMO must use its reasonable endeavours to ensure that the use of that facility does not impose unnecessary restrictions on the normal banking arrangements of Market Participants.
3.15.3 Connection point and virtual transmission node responsibility

(a) For each market connection point there is one person that is financially responsible for that connection point. The person that is financially responsible for such a connection point is:

(1) the Market Participant which has classified the connection point as a market load;

(2) the Market Participant which has classified the generating unit connected at that connection point as a market generating unit; or

(3) the Market Participant which has classified the network service connected at that connection point as a market network service.

(b) For each virtual transmission node there is one person that is financially responsible for that virtual transmission node. The person that is financially responsible for such a virtual transmission node is the Market Participant which is the Local Retailer for all of the market connection points assigned to that virtual transmission node.

3.15.4 Adjusted energy amounts connection points

Where a connection point is not a transmission network connection point, the adjusted gross energy amount for that connection point for a trading interval is calculated by the following formula:

\[ \text{AGE} = \text{ME} \times \text{DLF} \]

where:

- AGE is the adjusted gross energy amount to be determined;
- ME is the amount of electrical energy, expressed in MWh, flowing at the connection point in the trading interval, as recorded in the metering data in respect of that connection point and that trading interval (expressed as a positive value where the flow is towards the transmission network connection point to which the connection point is assigned and negative value where the flow is in the other direction); and
- DLF is the distribution loss factor applicable at that connection point.

3.15.5 Adjusted energy - transmission network connection points

Where a connection point is a transmission network connection point, the adjusted gross energy amount for that connection point for a trading interval is calculated by the following formula:

\[ \text{AGE} = \text{ME} - \text{AAGE} \]

where:

- AGE is the adjusted gross energy amount to be determined;
- ME is the amount of electrical energy, expressed in MWh, flowing at the connection point in the trading interval, as recorded in the metering data in respect of that connection point and that trading interval (expressed as a positive value where the flow is towards the transmission network, and negative value where the flow is in the other direction); and
AAGE is the aggregate of the *adjusted gross energy* amounts for that *trading interval* for each *connection point* assigned to that *transmission network connection point*, for which a *Market Participant* (other than a suspended Market Participant) is *financially responsible* (and in that aggregation positive and negative *adjusted gross energy* amounts are netted out to give a positive or negative aggregate amount).

### 3.15.5A Adjusted energy - virtual transmission nodes

For each *virtual transmission node*, the *adjusted gross energy* amount for that *virtual transmission node* for a *trading interval* is calculated by the following formula:

\[
AGE = - AAGE
\]

where:

AGE is the *adjusted gross energy* amount to be determined; and

AAGE is the aggregate of the *adjusted gross energy* amounts for that *trading interval* for each *connection point* assigned to that *virtual transmission node* for which a *Market Participant* (other than a suspended Market Participant) is *financially responsible* (and in that aggregation positive and negative *adjusted gross energy* amounts are netted out to give a positive or negative aggregate amount).

### 3.15.6 Spot market transactions

(a) In each *trading interval*, in relation to each *connection point* and to each *virtual transmission node* for which a *Market Participant* is *financially responsible*, a spot market transaction occurs, which results in a *trading amount* for that *Market Participant* determined in accordance with the formula:

\[
TA = AGE \times TLF \times RRP
\]

where

TA is the *trading amount* to be determined (which will be a positive or negative dollar amount for each *trading interval*);

AGE is the *adjusted gross energy* for that *connection point* or *virtual transmission node* for that *trading interval*, expressed in MWh;

TLF for a *transmission network connection point* or *virtual transmission node*, is the relevant *intra-regional loss factor* at that *connection point* or *virtual transmission node* respectively, and for any other *connection point*, is the relevant *intra-regional loss factor* at the *transmission network connection point* or *virtual transmission node* to which it is assigned in accordance with clause 3.6.2(b)(2); and

RRP is the *regional reference price* for the *regional reference node* to which the *connection point* or *virtual transmission node* is assigned, expressed in dollars per MWh.

**Note**

Where two *intra-regional loss factors* are determined for a *transmission network connection point* under clause 3.6.2(b)(2), AEMO will determine the relevant *intra-regional loss factor* for use under this clause in accordance with the procedure determined under clause 3.6.2(d1).
(b) Except with respect to any dispatch interval in a market suspension pricing schedule period in relation to which AEMO has issued a direction to a Market Suspension Compensation Claimant, AEMO is entitled to the trading amount resulting from a AEMO intervention event and, for the purposes of determining settlement amounts, any such trading amount is not a trading amount for the relevant Market Participant.

(c) A Directed Participant is entitled to the trading amount resulting from any service, other than the service the subject of the AEMO intervention event, rendered as a consequence of that event.

3.15.6A Ancillary service transactions

(a) In each trading interval, in relation to each enabled ancillary service generating unit or enabled ancillary service load, an ancillary services transaction occurs, which results in a trading amount for the relevant Market Participant determined in accordance with the following formula:

\[ TA = \text{the aggregate of } \frac{EA \times ASP}{12} \text{ for each dispatch interval in a trading interval} \]

where:

- \( TA \) (in $) = the trading amount to be determined (which is a positive number);
- \( EA \) (in MW) = the amount of the relevant market ancillary service which the ancillary service generating unit or ancillary service load has been enabled to provide in the dispatch interval; and
- \( ASP \) (in $ per MW per hour) = the ancillary service price for the market ancillary service for the dispatch interval for the region in which the ancillary service generating unit or ancillary service load has been enabled.

(b) In relation to each NMAS provider who provides non-market ancillary services under an ancillary services agreement, an ancillary services transaction occurs, which results in an amount payable by AEMO to the NMAS provider determined in accordance with that agreement.

(b1) Where an amount payable by AEMO under paragraph (b) is not determined on a trading interval basis, that amount is recovered in accordance with the relevant paragraphs (c8), (c9), (d) and (e), except that a reference to trading interval in the calculation of RBF, AGE, AAGE, TGE, ATGE, TSGE, ATSGE, TCE, ATCE is to be read as "the relevant period", and any other reference to
trading interval in those paragraphs is to be read as the "relevant billing period".

(c) [Deleted]

(c1) In this clause:

regional benefit ancillary services procedures means the procedures to determine the relative benefit that each region is estimated to receive from the provision of NMAS.

regional benefit factors means the factors to allocate, between regions, the costs associated with the provision of NMAS under each ancillary services agreement in accordance with the regional benefit ancillary services procedures.

(c2) Subject to paragraph (b1), AEMO must recover its liabilities under ancillary services agreements for the provision of:

(1) NSCAS from Market Customers in each region in accordance with paragraphs (c8) and (c9); and

(2) system restart ancillary services, from:

(i) Market Generators and Market Small Generation Aggregators in each region in accordance with paragraph (d); and

(ii) Market Customers in each region in accordance with paragraph (e).

(c3) In the statements to be provided under clauses 3.15.14 and 3.15.15 to a Market Customer, AEMO must separately identify the portion of the total amount payable by AEMO in respect of the relevant billing period under ancillary services agreements for the provision of NSCAS that:

(1) benefits specific regions in which there is a connection point for which the Market Customer is financially responsible (being the regional amounts given by the first summated term in the paragraph (c8) formula); and

(2) does not benefit specific regions (being the amount TNSCASp in the paragraph (c9) formula).

(c4) AEMO must develop and publish the regional benefit ancillary services procedures in accordance with the Rules consultation procedures. Without limiting the matters to be included in the regional benefit ancillary services procedures, they must require AEMO to take into account:

(1) for an NSCAS, the estimated increase for each region of the gross economic benefit from increased power transfer capability; and

(2) for a system restart ancillary service, that can be used to restart generating units in two or more regions, the relative benefit provided by that service to each region.
(c5) Subject to paragraph (c6), AEMO may amend the regional benefit ancillary services procedures from time to time in accordance with the Rules consultation procedures.

(c6) AEMO may make minor and administrative amendments to the regional benefit ancillary services procedures without complying with the Rules consultation procedures.

(c7) From time to time, AEMO must determine the regional benefit factors.

(c8) In each trading interval, in relation to each Market Customer for each region, an ancillary services transaction occurs, which results in a trading amount for the Market Customer determined in accordance with the following formula:

\[ T_{Ap,r} = \left( \sum_{NSCASs,p} \left( T_{NSCASs,p} \times RBFs,p,r \right) \right) \times \frac{AGEp,r}{AAGEp,r} \times \frac{1}{RBFs,p,r} \]

Where

Subscript 'P' is the relevant period;
Subscript 'R' is the relevant
Subscript 'S' is the relevant NSCAS;

\( T_{Ap,r} \) (in $) = trading amount payable by the Market Customer in respect of the relevant region and trading interval;

\( T_{NSCASs,p} \) the total amount payable by AEMO for the provision of the relevant NSCAS under an ancillary services agreement in respect of the relevant trading interval;

\( RBFs,p,r \) (number) = the latest regional benefit factor assigned to the provision of the relevant NSCAS under an ancillary services agreement in respect of the relevant region and trading interval, as determined by AEMO under paragraph (c7);

\( AGEp,r \) (in MWh) = the sum of the adjusted gross energy figures in respect of the Market Customer’s relevant connection points located in the region for the relevant trading interval; and

\( AAGEp,r \) (in MWh) = the aggregate \( AGEp,r \) figures for all Market Customers in respect of the relevant region and trading interval.

(c9) In each trading interval, in relation to each Market Customer, an ancillary services transaction occurs, which results in a trading amount for the Market Customer determined in accordance with the following formula:
\[ T_A = \sum \left( \frac{SRP_i \times RBF_R}{2} \right) \times \left( \frac{TGE_R + TSEG_R}{ATGE_R + ATSEG_R} \right) \times -1 \]

Where

\[ T_A \text{ (in $)} = \text{the trading amount to be determined in respect of the relevant region and trading interval (which is a negative number);} \]

\[ SRP_i \text{ (in $)} = \text{the amount payable by AEMO in respect of the trading interval under an individual ancillary services agreement in respect of the provision of a specific system restart ancillary service;} \]

\[ RBF_R \text{ (number)} = \text{the latest regional benefit factor assigned to the provision of the relevant system restart ancillary service under an individual ancillary} \]
services agreement in respect of the relevant region and trading interval, as determined by AEMO under paragraph (c7);

\[ TGE_R \text{ (in MWh)} = \text{the generator energy for the Market Generator for the trading interval in that region}; \]

\[ TSGE_R \text{ (in MWh)} = \text{the small generator energy for the Market Small Generator Aggregator for the trading interval in that region}; \]

\[ ATGE_R \text{ (in MWh)} = \text{the aggregate of the generator energy figures for all Market Generators for the trading interval in that region}; \]

\[ ATSGE_R \text{ (in MWh)} = \text{the aggregate of the small generator energy figures for all Market Small Generator Aggregators for the trading interval in that region}. \]

(e) In each trading interval, in relation to each Market Customer, for each region, an ancillary services transaction occurs, which results in a trading amount for the Market Customer determined in accordance with the following formula:

\[
TA = \sum \left( \frac{SRP_i \times RBF_{Ri}}{2} \times \frac{TCE_R}{ATCE_R} \right) \times -1
\]

Where

\[ TA \text{ (in $)} = \text{the trading amount to be determined in respect of the relevant region and trading interval (which is a negative number)}; \]

\[ SRP_i \text{ (in $)} = \text{has the meaning given in clause 3.15.6A(d)}; \]

\[ RBF_{Ri} \text{ (number)} = \text{the latest regional benefit factor assigned to the provision of the relevant system restart ancillary service under an individual ancillary services agreement in respect of the relevant region and trading interval, as determined by AEMO under paragraph (c7)}; \]

\[ TCE_R \text{ (in MWh)} = \text{the customer energy for the Market Customer for the trading interval in that region}; \]

\[ ATCE_R \text{ (in MWh)} = \text{the aggregate of the customer energy figures for all Market Customers for the trading interval in that region}. \]

(f) The total amount calculated by AEMO under clause 3.15.6A(a) for each of the fast raise service, slow raise service or delayed raise service in respect of each dispatch interval which falls within the trading interval must be allocated to each region in accordance with the following procedure and the information provided under clause 3.9.2A(b). AEMO must:

1. allocate for each region and for each dispatch interval within the relevant trading interval the proportion of the total amount calculated by AEMO under clause 3.15.6A(a) for each of the fast raise service, slow raise service or delayed raise service between global market ancillary services requirements and local market ancillary service requirement pro-rata to the respective marginal prices for each such service;
(2) calculate for each relevant dispatch interval the sum of the costs of acquiring the **global market ancillary service requirements** for all regions and the sum of the costs of acquiring each **local market ancillary service requirement** for all regions, as determined pursuant to clause 3.15.6A(f)(1); and

(3) allocate for each relevant dispatch interval the sum of the costs of the **global market ancillary service requirement** and each **local market ancillary service requirement** calculated in clause 3.15.6A(f)(2) to each region as relevant to that requirement pro-rata to the aggregate of the generator energy for the Market Generators and small generator energy for the Market Small Generation Aggregators in each region during the trading interval.

For the purpose of this clause 3.15.6A(f) **RTCRSP** is the sum of:

(i) the **global market ancillary service requirement** cost for that region, for all dispatch intervals in the relevant trading interval, as determined pursuant to clause 3.15.6A(f)(3); and

(ii) all **local market ancillary service requirement** costs for that region, for all dispatch intervals in the relevant trading interval, as determined pursuant to clause 3.15.6A(f)(3).

In each trading interval, in relation to each Market Generator and each Market Small Generation Aggregator in a given region, an ancillary services transaction occurs, which results in a trading amount for that Market Generator and that Market Small Generation Aggregator determined in accordance with the following formula:

\[
TA = RTCRSP \times \frac{TGE + TSGE}{RATGE + RATEGE} \times -1
\]

where:

- **TA** (in $) = the trading amount to be determined (which is a negative number);
- **RTCRSP** (in $) = the total of all amounts calculated by AEMO as appropriate to recover from the given region as calculated in this clause 3.15.6A(f) for the fast raise service, slow raise service or delayed raise service in respect of dispatch intervals which fall in the trading interval;
- **TGE** (in MWh) = the generator energy for the Market Generator in that region for the trading interval;
The total amount calculated by AEMO under clause 3.15.6A(a) for each of the fast lower service, slow lower service or delayed lower service in respect of each dispatch interval which falls within the trading interval must be allocated to each region in accordance with the following procedure and the information provided under clause 3.9.2A(b). AEMO must:

(1) allocate for each region and for each dispatch interval within the relevant trading interval the proportion of the total amount calculated by AEMO under clause 3.15.6A(a) for each of the fast lower service, slow lower service or delayed lower service between global market ancillary service requirements and local market ancillary service requirement pro rata to the respective marginal prices of each such service;

(2) calculate for each relevant dispatch interval the sum of the costs of acquiring the global market ancillary service requirements for all regions and the sum of the costs of acquiring each local market ancillary service requirement for all regions, as determined pursuant to clause 3.15.6A(g)(1); and

(3) allocate for each relevant dispatch interval the sum of the costs of the global market ancillary service requirement and each local market ancillary service requirement calculated in clause 3.15.6A(g)(2) to each region as relevant to that requirement pro-rata to the aggregate of the customer energy figures for all Market Customers in each region during the trading interval.

For the purpose of this clause 3.15.6A(g) RTCLSP is the sum of:

(i) the global market ancillary service requirement cost for that region, for all dispatch intervals in the relevant trading interval, as determined pursuant to clause 3.15.6A(g)(3); and

(ii) all local market ancillary service requirement costs for that region, for all dispatch intervals in the relevant trading interval, as determined pursuant to clause 3.15.6A(g)(3).
In each trading interval, in relation to each Market Customer in a given region, an ancillary services transaction occurs, which results in a trading amount for that Market Customer determined in accordance with the following formula:

\[
TA = RTCLSP \times \frac{TCE}{RATCE} \times -1
\]

where:

\( TA \) (in $) = the trading amount to be determined (which is a negative number); 

\( RTCLSP \) (in $) = the total of all amounts calculated by AEMO as appropriate to recover from the given region as calculated in this clause 3.15.6A(g) for the fast lower service, slow lower service or delayed lower service in respect of dispatch intervals which fall in the trading interval;

\( TCE \) (in MWh) = the customer energy for the Market Customer in that region for the trading interval; and

\( RATCE \) (in MWh) = the aggregate of the customer energy figures for all Market Customers in that region for the trading interval.

(h) The total amount calculated by AEMO under paragraph (a) for the regulating raise service or the regulating lower service in respect of each dispatch interval which falls within the trading interval must be allocated by AEMO to each region in accordance with the following procedure and the information provided under clause 3.9.2A(b):

1. allocate on a pro-rata basis for each region and for each dispatch interval within the relevant trading interval the proportion of the total amount calculated by AEMO under paragraph (a) for the regulating raise service and regulating lower service between global market ancillary service requirements and local market ancillary service requirements to the respective marginal prices for each such service; and

2. calculate for each relevant dispatch interval the sum of the costs of acquiring the global market ancillary service requirements for all regions and the sum of the costs of acquiring local market ancillary service requirements for all regions, as determined under subparagraph (1).

(i) In each trading interval in relation to:
(1) Each Market Generator, Market Small Generation Aggregator or Market Customer which has metering to allow their individual contribution to the aggregate deviation in frequency of the power system to be assessed, an ancillary services transaction occurs, which results in a trading amount for that Market Generator, Market Small Generation Aggregator or Market Customer determined in accordance with the following formula:

\[ TA = PTA \times -1 \]

and

\[ PTA = \text{the aggregate of } \left( TSFCAS \times \frac{MPF}{AMPF} \right) \]

for each dispatch interval in the trading interval for global market ancillary service requirements and local market ancillary service requirements where:

- \( TA \) (in $) = the trading amount to be determined (which is a negative number);
- \( TSFCAS \) (in $) = the total of all amounts calculated by AEMO under paragraph (h)(2) for the regulating raise service or the regulating lower service in respect of a dispatch interval;
- \( MPF \) (a number) = the contribution factor last set by AEMO for the Market Generator, Market Small Generation Aggregator or Market Customer, as the case may be, under paragraph (j) for the region or regions relevant to the regulating raise service or regulating lower service; and
- \( AMPF \) (a number) = the aggregate of the MPF figures for all Market Participants for the dispatch interval for the region or regions relevant to the regulating raise service or regulating lower service.

or

(2) In relation to each Market Customer for whom the trading amount is not calculated in accordance with the formula in subparagraph (1), an ancillary services transaction occurs, which results in a trading amount for that Market Customer determined in accordance with the following formula:

\[ TA = PTA \times -1 \]
and

\[ PTA = \text{the aggregate of} \left( \frac{TSFCAS \times MPF \times TCE}{AMPF \times ATCE} \right) \]

for each dispatch interval in the trading interval for global market ancillary service requirements and local market ancillary service requirements where:

\[ TA \text{ (in \$)} = \text{the trading amount to be determined (which is a negative number);} \]

\[ TSFCAS \text{ (in \$)} = \text{has the meaning given in subparagraph (1);} \]

\[ MPF \text{ (a number)} = \text{the aggregate of the contribution factor set by AEMO under paragraph (j) for Market Customers, for whom the trading amount is not calculated in accordance with the formula in subparagraph (1) for the region or regions relevant to the regulating raise service or the regulating lower service;} \]

\[ AMPF \text{ (a number)} = \text{the aggregate of the MPF figures for all Market Participants for the dispatch interval for the region or regions relevant to the regulating raise service or regulating lower service;} \]

\[ TCE \text{ (in MWh)} = \text{the customer energy for the Market Customer for the trading interval in the region or regions relevant to the regulating raise service or regulating lower service; and} \]

\[ ATCE \text{ (in MWh)} = \text{the aggregate of the customer energy figures for all Market Customers, for whom the trading amount is not calculated in accordance with the formula in subparagraph (1), for the trading interval for the region or regions relevant to that regulating raise service or regulating lower service.} \]

(j) AEMO must determine for the purpose of paragraph (i):

(1) a contribution factor for each Market Participant; and
(2) notwithstanding the estimate provided in paragraph (nb), if a \textit{region} has or \textit{regions} have operated asynchronously during the relevant \textit{trading interval}, the contribution factors relevant to the allocation of \textit{regulating raise service} or \textit{regulating lower service} to that \textit{region} or \textit{regions}, in accordance with the procedure prepared under paragraph (k).

(k) \textit{AEMO} must prepare a procedure for determining contribution factors for use in paragraph (j) and, where \textit{AEMO} considers it appropriate, for use in paragraph (nb), taking into account the following principles:

(1) the contribution factor for a \textit{Market Participant} should reflect the extent to which the \textit{Market Participant} contributed to the need for \textit{regulation services};

(2) the contribution factor for all \textit{Market Customers} that do not have \textit{metering} to allow their individual contribution to the aggregate need for \textit{regulation services} to be assessed must be equal;

(3) for the purpose of paragraph (j)(2), the contribution factor determined for a group of \textit{regions} for all \textit{Market Customers} that do not have \textit{metering} to allow the individual contribution of that \textit{Market Customer} to the aggregate need for \textit{regulation services} to be assessed, must be divided between \textit{regions} in proportion to the total \textit{customer energy} for the \textit{regions};

(4) the individual \textit{Market Participant's} contribution to the aggregate need for \textit{regulation services} will be determined over a period of time to be determined by \textit{AEMO};

(5) a \textit{Registered Participant} which has classified a \textit{scheduled generating unit}, \textit{scheduled load}, \textit{ancillary service generating unit} or \textit{ancillary service load} (called a \textit{Scheduled Participant}) will not be assessed as contributing to the deviation in the \textit{frequency} of the \textit{power system} if within a \textit{dispatch interval}:

(i) the Scheduled Participant achieves its \textit{dispatch} target at a uniform rate;

(ii) the Scheduled Participant is \textit{enabled} to provide a \textit{market ancillary service} and responds to a control signal from \textit{AEMO} to \textit{AEMO's} satisfaction; or

(iii) the Scheduled Participant is not \textit{enabled} to provide a \textit{market ancillary service}, but responds to a need for \textit{regulation services} in a way which tends to reduce the aggregate deviation;

(6) where contributions are aggregated for \textit{regions} that are operating asynchronously during the calculation period under paragraph (i), the contribution factors should be normalised so that the total contributions from any non-synchronised \textit{region} or \textit{regions} is in the same proportion as the total \textit{customer energy} for that \textit{region} or \textit{regions}; and
(7) a *Semi-Scheduled Generator* will not be assessed as contributing to the deviation in the *frequency* of the power system if within a *dispatch interval*, the semi-scheduled generating unit:

(i) achieves its *dispatch level* at a uniform rate;

(ii) is *enabled* to provide a *market ancillary service* and responds to a control signal from AEMO to AEMO’s satisfaction; or

(iii) is not *enabled* to provide a *market ancillary service*, but responds to a need for *regulation services*.

(l) AEMO may *amend* the procedure referred to in clause 3.15.6A(j) from time to time.

(m) AEMO must comply with the *Rules consultation procedures* when making or amending the procedure referred to in clause 3.15.6A(k).

(n) AEMO must *publish*, in accordance with the *timetable*, the historical data used in determining a factor for each *Market Participant* for the purposes of clauses 3.15.6A(h) and (i) in accordance with the procedure contemplated by clause 3.15.6A(k).

(na) Notwithstanding any other provisions of the *Rules*, AEMO must *publish* the factors determined in accordance with clause 3.15.6A(j)(1) at least 10 *business days* prior to the application of those factors in accordance with clauses 3.15.6A(h) and 3.15.6A(i).

(nb) When a *region* is or *regions* are operating asynchronously, AEMO must *publish* (where appropriate in accordance with the procedure developed under paragraph (k)), an estimate of the contribution factors referred to in paragraph (j)(2) to be applied for information purposes only by *Market Participants* for the duration of the separation.

(o) In this clause 3.15.6A:

(1) *'generator energy'* in respect of a *Market Generator* for a *trading interval* means the sum of the *adjusted gross energy* figures calculated for that *trading interval* in respect of that *Market Generator’s* applicable *connection points*, provided that, if the sum of those figures is negative, then the *Market Generator’s* *generator energy* for that *trading interval* is zero;

(2) a *connection point* is an applicable *connection point* of a *Market Generator* if:

(A) the *Market Generator* is financially responsible for the *connection point*; and

(B) the *connection point* connects a *market generating unit* to the *national grid*;

(3) *'customer energy'* in respect of a *Market Customer* for a *trading interval* means the sum of the *adjusted gross energy* figures calculated for that *trading interval* in respect of that *Market Customer’s* relevant *connection points*;
(4) a connection point is a relevant connection point of a Market Customer if:

(A) the Market Customer is financially responsible for the connection point; and

(B) the load at that connection point has been classified (or is deemed to be classified) as a market load;

(5) 'small generator energy' in respect of a Market Small Generation Aggregator for a trading interval means the sum of the adjusted gross energy figures calculated for that trading interval in respect of that Market Small Generation Aggregator's applicable connection points, provided that, if the sum of those figures is negative, then the Market Small Generation Aggregator's small generator energy for that trading interval is zero; and

(6) a connection point is an applicable connection point of a Market Small Generator Aggregator if:

(A) the Market Small Generator Aggregator is financially responsible for the connection point; and

(B) the connection point connects a small generating unit classified as a market generating unit to the national grid.

(p) When AEMO dispatches a quantity of regulating raise service or regulating lower service in addition to the quantity it determines in accordance with the dispatch algorithm, AEMO must:

(1) for the purposes of paragraphs (f) and (g), include the additional quantity in the cost of delayed services; and

(2) for the purposes of paragraphs (h) and (i), exclude the additional quantity in the cost of regulation services,

taking into account the requirements in clauses 3.8.1(a) and (b) to maximise the value of spot market trading.

### 3.15.7 Payment to Directed Participants

(a) Subject to paragraphs (b) and (d1), AEMO must pay compensation to Directed Participants calculated in accordance with clauses 3.15.7, 3.15.7A and 3.15.7B, as the case may be, for any service which the Directed Participant was required to provide in order to comply with the direction.

(b) For the purpose of clause 3.15.8 and 3.15.10C the amount of compensation due to a Directed Participant pursuant to clause 3.15.7(a) must include interest on the sum of that amount less any payment made in accordance with clause 3.15.10C(a), computed at the average bank bill rate for the period beginning on the day on which payment was required to be made under clauses 3.15.16 and 3.15.17 in respect of the final statement for the billing period in which the direction was issued and ending on the day on which payment is required to be made pursuant to clause 3.15.10C.
(c) Subject to clause 3.15.7(d) and clause 3.15.7B, the compensation payable to each Directed Participant for the provision of energy or market ancillary services pursuant to a direction is to be determined in accordance with the formula set out below

\[ \text{DCP} = \text{AMP} \times \text{DQ} \]

where:

\[ \text{DCP} = \text{the amount of compensation the Directed Participant is entitled to receive;} \]

\[ \text{AMP} = \text{the price below which are 90\% of the spot prices or ancillary service prices (as the case may be) for the relevant service provided by Scheduled Generators, Semi-Scheduled Generators, Scheduled Network Service Providers or Market Customers in the region to which the direction relates, for the 12 months immediately preceding the trading day in which the direction was issued; and} \]

\[ \text{DQ} = \text{is either:} \]

\[ (A) \text{ the difference between the total adjusted gross energy delivered or consumed by the Directed Participant and the total adjusted gross energy that would have been delivered or consumed by the Directed Participant had the direction not been issued; or} \]

\[ (B) \text{ the amount of the relevant market ancillary service which the Directed Participant has been enabled to provide in response to the direction.} \]

(d) If at the time AEMO issues a direction:

(1) the Directed Participant had submitted a dispatch bid, dispatch offer or rebid acknowledged by AEMO in accordance with clause 3.8.8 for dispatch of the service that is to be dispatched in accordance with the direction; and

(2) the direction was issued because AEMO was prevented from dispatching the Directed Participant's plant in accordance with that dispatch bid, dispatch offer or rebid due to a failure of the central dispatch process,

the Directed Participant is entitled to receive compensation for the provision of that service at a price equal to the price in that dispatch bid, dispatch offer or rebid acknowledged by AEMO in accordance with clause 3.8.8, as the case may be.
(d1) Where a Directed Participant is also a Market Suspension Compensation Claimant with respect to any dispatch interval in relation to which AEMO has issued a direction, such Directed Participant:

(1) may be entitled to compensation calculated in accordance with clause 3.14.5A(d); and

(2) is not entitled to compensation calculated in accordance with paragraph (c).

(e) AEMO must, in accordance with the intervention settlement timetable, advise each Directed Participant in writing of the amount the Directed Participant is entitled to receive pursuant to clause 3.15.7(c) or clause 3.15.7(d).

3.15.7A Payment to Directed Participants for services other than energy and market ancillary services

(a) Subject to clause 3.15.7(d) and clause 3.15.7B, AEMO must compensate each Directed Participant for the provision of services pursuant to a direction other than energy and market ancillary services, at the fair payment price of the services determined in accordance with this clause 3.15.7A.

(a1) In this clause 3.15.7A, a direction is a direction for services other than energy and market ancillary services to the extent that the need for the direction could not have been avoided by the central dispatch process had there been a dispatch bid, dispatch offer or rebid made consistent with the requirements of clauses 3.8.6, 3.8.6A, 3.8.7, 3.8.7A or 3.8.8(d) (whichever is applicable) for dispatch of plant relevant to that direction for one or more of the following services:

(1) energy; and

(2) any one service of the market ancillary services.

(a2) For the avoidance of doubt, any component of a direction that satisfies clause 3.15.7A(a1) is to be considered for compensation under this clause 3.15.7A and clause 3.15.7B, as the case may be. Any other component of the direction that does not satisfy clause 3.15.7A(a1) is to be considered for compensation under clause 3.15.7 and clause 3.15.7B, as the case may be.

(b) Subject to clause 3.15.7A(e) and clause 3.15.7A(e1), AEMO must, in accordance with the intervention settlement timetable and any guidelines developed by AEMO in accordance with the Rules consultation procedures, determine if in AEMO’s reasonable opinion, an independent expert could reasonably be expected to determine a fair payment price for the services provided pursuant to the direction within a reasonable time period.

(b1) If AEMO determines pursuant to clause 3.15.7A(b) that an independent expert could reasonably be expected to determine a fair payment price for the services provided pursuant to the direction within a reasonable time period it must as soon as reasonably practicable after making such determination publish its determination and, subject to clause 3.15.7A(e1), appoint an independent expert, in accordance with the intervention settlement timetable,
to determine the fair payment price for the services provided pursuant to the direction.

(c) *AEMO* must include as part of the terms of appointment of an independent expert the following requirements:

(1) that the independent expert must, in determining the fair payment price of the relevant service for the purposes of clause 3.15.7A, take into account:

(i) other relevant pricing methodologies in Australia and overseas, including but not limited to:

   (A) other electricity markets;

   (B) other markets in which the relevant service may be utilised; and

   (C) relevant contractual arrangements which specify a price for the relevant service;

(ii) the following principles:

   (A) the disinclination of *Scheduled Generators*, *Semi-Scheduled Generators*, *Market Generators*, *Scheduled Network Service Providers* or *Market Customers* to provide the service the subject of the direction must be disregarded;

   (B) the urgency of the need for the service the subject of the direction must be disregarded;

   (C) the *Directed Participant* is to be treated as willing to supply at the market price that would otherwise prevail for the directed services the subject of the direction in similar demand and supply conditions; and

   (D) the fair payment price is the market price for the directed services the subject of the direction that would otherwise prevail in similar demand and supply conditions;

(2) that the independent expert must determine and publish a draft report, in accordance with the *intervention settlement timetable*, setting out:

(i) a description of the services provided in response to the direction;

(ii) the independent expert's draft determination of each fair payment price for the services provided;

(iii) the methodology and assumptions used by the independent expert in making the draft determination of the fair payment price; and

(iv) a request for submissions from interested parties on the matters set out in the draft report;

(3) that the independent expert must, in accordance with the *intervention settlement timetable*, determine the fair payment price for the services
provided, taking into account the submissions received, and must prepare and publish a final report setting out:

(i) the description of the services provided in response to the direction;

(ii) the independent expert's determination of the fair payment price for the services provided;

(iii) the methodology and assumptions used by the independent expert in making the determination of each fair payment price; and

(iv) summaries of the submissions made by interested parties;

(4) that the independent expert must deliver to AEMO a final tax invoice for the services rendered at the time he or she publishes the final report; and

(5) that a report published by the independent expert pursuant to clause 3.15.7A(c) must not disclose confidential information or the identity of a Directed Participant.

(d) In accordance with the intervention settlement timetable, AEMO must calculate the compensation payable to the Directed Participant using the fair payment price published by the independent expert under clause 3.15.7A(c)(3).

(e) The fair payment price determined in accordance with clause 3.15.7A(c)(3) is to be the fair payment price for that service to be applied in all future occurrences where there is a direction for that service at any time within a period of 12 calendar months from the date on which the determination of that price was published.

(e1) AEMO must not appoint an independent expert under clause 3.15.7A(b1) in respect of a direction for a service in respect of which:

(1) there is a determination of an independent expert in place in accordance with clause 3.15.7A(e) in relation to that service; or

(2) AEMO has appointed an independent expert to determine the fair payment price for that service under clause 3.15.7A and the independent expert has not yet made a determination of the fair payment price.

In these circumstances, AEMO must apply to the subsequent direction the fair payment price for that service determined, or to be determined, by the independent expert.

(f) Within 1 business day of calculating the compensation payable pursuant to clause 3.15.7A(a) by application of clause 3.15.7A(e) or pursuant to clause 3.15.7A(d), AEMO must advise the relevant Directed Participant in writing of the amount of compensation.

(g) The determination of a fair payment price pursuant to clause 3.15.7A(c)(1) and the calculation of compensation payable to Directed Participants pursuant to clause 3.15.7A(d) is final and binding.
3.15.7B Claim for additional compensation by Directed Participants

(a) Subject to clauses 3.15.7B(a1) and 3.15.7B(a4), a Directed Participant entitled to compensation pursuant to clause 3.14.5A(d), clause 3.15.7 or clause 3.15.7A may, within 15 business days of receipt of the advice referred to in clauses 3.14.5A(g), 3.15.7(e) or 3.15.7A(f), make a written submission to AEMO claiming an amount equal to the sum of:

(1) the aggregate of the loss of revenue and additional net direct costs incurred by the Directed Participant in respect of a scheduled generating unit, semi-scheduled generating unit or scheduled network services, as the case may be, as a result of the provision of the service under direction; less

(2) the amount notified to that Directed Participant pursuant to clause 3.14.5A(g), clause 3.15.7(e) or clause 3.15.7A(f); less

(3) the aggregate amount the Directed Participant is entitled to receive in accordance with clause 3.15.6(c) for the provision of a service rendered as a result of the direction.

(a1) Subject to clause 3.15.7B(a4), if AEMO determines pursuant to clause 3.15.7A(b) that an independent expert could not reasonably be expected to determine within a reasonable period of time the relevant fair payment price, a Directed Participant may, in accordance with the intervention settlement timetable, make a written submission to AEMO claiming compensation from AEMO for the provision of services under the direction equal to:

(1) loss of revenue and additional net direct costs which the Directed Participant incurred as a result of the provision of services under the direction; and

(2) a reasonable rate of return on the capital employed in the provision of the service determined by reference as far as reasonably practicable to rates of return for the provision of similar services by similar providers of such services.

(a2) Subject to clause 3.15.7B(a4), if a Directed Participant entitled to compensation pursuant to clause 3.15.7(d) considers that the amount notified pursuant to clauses 3.15.7(e) is less than the amount it is entitled to receive pursuant to that clause, the Directed Participant may, in accordance with the intervention settlement timetable, make a written submission to AEMO requesting compensation from AEMO for that difference.

(a3) For the purposes of the calculation of additional net direct costs pursuant to paragraphs (a)(1) and (a1)(1), the additional net direct costs incurred by the Directed Participant in respect of that scheduled generating unit, semi-scheduled generating unit or scheduled network services (as the case may be) includes without limitation:

(1) fuel costs in connection with the relevant generating unit or scheduled network services;
(2) incremental maintenance costs in connection with the relevant generating unit or scheduled network services;

(3) incremental manning costs in connection with the relevant generating unit or scheduled network services;

(4) acceleration costs of maintenance work in connection with the relevant generating unit or scheduled network services, where such acceleration costs are incurred to enable the generating unit or scheduled network services to comply with the direction;

(5) delay costs for maintenance work in connection with the relevant generating unit or scheduled network services, where such delay costs are incurred to enable the generating unit or scheduled network services to comply with the direction;

(6) other costs incurred in connection with the relevant generating unit or scheduled network services, where such costs are incurred to enable the generating unit or scheduled network services to comply with the direction; and

(7) any compensation which the Directed Participant receives or could have obtained by taking reasonable steps in connection with the relevant generating unit or scheduled network services being available.

(a4) In respect of a single intervention price trading interval, a Directed Participant may only make a claim pursuant to clauses 3.15.7B(a), 3.15.7B(a1) or 3.15.7B(a2) if the amount of the claim in respect of that intervention price trading interval is greater than $5,000.

(b) The submissions pursuant to clauses 3.15.7B(a), 3.15.7B(a1) and 3.15.7B(a2) must:

(1) itemise each component of a claim;

(2) contain sufficient data and information to substantiate each component of a claim for loss of revenue and additional direct costs incurred and the reasonable rate of return, as the case may be; and

(3) be signed by an authorised officer of the applicant certifying that the written submission is true and correct.

(c) AEMO must, in accordance with the intervention settlement timetable:

(1) refer a claim by a Directed Participant under clause 3.15.7B(a), 3.15.7B(a1) or 3.15.7B(a2) to an independent expert to determine such claim in accordance with clause 3.12.3 if the claim is equal to or greater than $20,000 and the additional intervention claim that includes that claim is equal to or greater than $100,000; and

(2) determine in its sole discretion if all other claims by a Directed Participant in respect of that direction pursuant to clauses 3.15.7B(a), 3.15.7B(a1) and 3.15.7B(a2) are reasonable and if so pay the amount claimed in accordance with clause 3.15.10C.
(d) If AEMO considers that a claim by a Directed Participant under clause 3.15.7B(a) or 3.15.7B(a1) or 3.15.7B(a2) is unreasonable, it must, in accordance with the intervention settlement timetable:

1. advise the Directed Participant of its determination in writing, setting out its reasons; and
2. refer the matter to an independent expert to determine the claim for compensation in accordance with clause 3.12.3.

3.15.8 Funding of Compensation for directions

(a) AEMO must, in accordance with the intervention settlement timetable, calculate the compensation recovery amount being:

1. the sum of:
   
   i. the total of the compensation payable to AEMO by Affected Participants and Market Customers under clause 3.12.2 in respect of a direction for the provision of energy; plus
   
   ii. the total of the amounts retained by AEMO pursuant to clause 3.15.6(b) in respect of a direction for the provision of energy;

2. less the sum of:

   i. the total of the compensation payable by AEMO to Affected Participants and Market Customers pursuant to clause 3.12.2 in respect of a direction for the provision of energy; plus

   ii. the total of the compensation payable by AEMO to Directed Participants (other than Directed Participants who are also Market Suspension Compensation Claimants) pursuant to clause 3.15.7(a) in respect of a direction for the provision of energy; plus

   iii. the total amount payable by AEMO to the independent expert pursuant to clause 3.12.3(c).

(b) AEMO must, in accordance with the intervention settlement timetable, calculate a figure for each Market Customer in each region applying the following formula:

\[ MCP = \frac{E}{\sum E} \times \frac{RB}{\sum RB} \times CRA \]

where

MCP is the amount payable or receivable by a Market Customer pursuant to this clause 3.15.8(b);

E is the sum of the Market Customer's adjusted gross energy amounts at each connection point for which the Market Customer is financially responsible in a region, determined in accordance with clauses 3.15.4 and 3.15.5 in respect of the relevant intervention price trading intervals excluding any loads in respect of which the Market Customer submitted a dispatch bid for the relevant intervention price trading interval in that region; and
RB is the regional benefit determined by AEMO pursuant to clause 3.15.8(b1) at the time of issuing the *direction*.

CRA is the *compensation recovery amount*.

**Note**

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(b1) AEMO must, as soon as practicable following the issuance of a *direction*, determine the relative benefit each *region* received from the issuance of a *direction* in accordance with the *regional benefit directions procedures*.

(b2) AEMO must develop in accordance with the *Rules consultation procedures* a procedure to determine the relative benefit each *region* receives from the issuance of a *direction* (the *regional benefit directions procedures*). Such procedures must take into account, where applicable to the reason the *direction* was given, the load at risk of not being supplied if the *direction* were not issued or the extent of improvement in available energy reserve in the *region*, capability to control voltage in the *region*, and capability to control power system frequency within the *region* and any other relevant matters.

(c) If the figure calculated for a *Market Customer* under clause 3.15.8(b) is negative, the absolute value of that amount is the amount payable by the *Market Customer* to AEMO pursuant to clause 3.15.8(b).

(d) Subject to clause 3.15.22, if the figure calculated for a *Market Customer* under clause 3.15.8(b) is positive, such amount is the amount receivable by the *Market Customer* from AEMO pursuant to clause 3.15.8(b), subject to the provisions of clause 3.15.22.

(e) AEMO must, in accordance with the *intervention settlement timetable*, calculate for each *ancillary service* the subject of a *direction*, the "*ancillary service compensation recovery amount*" being:

(1) the sum of:

   (i) the total of the compensation payable to AEMO by *Affected Participants* and *Market Customers* under clause 3.12.2 in respect of a *direction* for the provision of that *ancillary service*; plus

   (ii) the total of the amounts retained by AEMO pursuant to clause 3.15.6(b) in respect of a *direction* for the provision of that *ancillary service*;

(2) less the sum of:

   (i) the total of the compensation payable by AEMO to *Affected Participants* and *Market Customers* pursuant to clause 3.12.2 in respect of a *direction* for the provision of that *ancillary service*; plus

   (ii) the total of the compensation payable by AEMO to *Directed Participants* pursuant to clause 3.15.7(a) in respect of a *direction* for the provision of that *ancillary service*; plus
(iii) the total amount payable by *AEMO* to the independent expert pursuant to clause 3.12.3(c), if the *direction* the subject of the independent expert's determination was with respect to that ancillary service.

(f) The *trading amount* must be calculated as follows:

1. subject to clause 3.15.8(f)(2) and (3) *AEMO* must use the appropriate formula set out in clause 3.15.6A(c8), (c9), (d), (e), (f), (g), (h) or (i) depending on which ancillary service was the subject of the *direction*;

2. *TNSCASP, TSRP, RTCRSP, RTCLSP or TSFCAS* (as applicable) in the relevant formula is equal to the ancillary service compensation recovery amount for the relevant ancillary service in respect of the *direction*; and

3. if *TCE, TGE, TSGE, AGE, ATCE, ATGE, ATSGE or AAGE* is used in the relevant formula, then the words 'the *trading interval*' in the definitions of those terms in the formula are to be read as 'all of the *trading intervals* during which the *direction* applied'.

(g) Any compensation payable by *AEMO* under clause 3.12.2 and 3.15.7 not recovered under clauses 3.15.8(b) and 3.15.8(e) must be recovered from *Market Customers, Market Generators and Market Small Generation Aggregators*. *AEMO* must, in accordance with the *intervention settlement timetable*, calculate a figure for each *Market Customer, Market Generator and Market Small Generation Aggregator* in each *region* applying the following formula:

\[
MCP = \frac{TGE + TSGE - TCE}{RATGE + RATSGE - RATCE} \times \frac{RB}{\sum RB} \times CRA \times -1
\]

where:

- **MCP** = the amount payable or receivable by a *Market Customer, Market Generator or Market Small Generation Aggregator* under this clause 3.15.8(g);
- **TGE** = the generator energy for the *Market Generator* in that *region* of the relevant *trading interval* for the period of the *direction*;
- **TSGE** = the small generator energy for the *Market Small Generation Aggregator* in that *region* of the relevant *trading interval* for the period of the *direction*;
- **TCE** = the customer energy for the *Market Customer* in that *region* of the relevant...
In clause 3.15.8(g):

(1) **customer energy** in respect of a Market Customer for a trading interval means the sum of the adjusted gross energy figures calculated for that trading interval in respect of that Market Customer's relevant connection points;

(2) a connection point is a "relevant connection point" of a Market Customer if:
   
   (i) the Market Customer is financially responsible for the connection point; and
   
   (ii) the load at that connection point has been classified (or is deemed to be classified) as a market load;

(3) **generator energy** in respect of a Market Generator for a trading interval means the sum of the adjusted gross energy figures calculated for that trading interval in respect of that Market Generator's applicable connection points, provided that, if the sum of those figures is negative, then the Market Generator's generator energy for that trading interval is zero;

(4) a connection point is an "applicable connection point" of a Market Generator if:

   (i) the Market Generator is financially responsible for the connection point; and

RATGE = the aggregate of the generator energy for all Market Generators in that region of the relevant trading interval for the period of the direction;

RATSGE = the aggregate of the small generator energy for all Market Small Generation Aggregation in that region of the relevant trading interval for the period of the direction;

RATCE = the aggregate of the customer energy for all Market Customers in that region of the relevant trading interval for the period of the direction;

RB = the regional benefit determined by AEMO under clause 3.15.8(b1) at the time of issuing the direction; and

CRA = the compensation recovery amount.
(ii) the connection point connects a market generating unit to the national grid;

(5) small generator energy in respect of a Market Small Generation Aggregator for a trading interval means the sum of the adjusted gross energy figures calculated for that trading interval in respect of that Market Small Generation Aggregator's applicable connection points, provided that, if the sum of those figures is negative, then the Market Small Generation Aggregator's small generator energy for that trading interval is zero; and

(6) a connection point is an "applicable connection point" of a Market Small Generation Aggregator if:

(i) the Market Small Generation Aggregator is financially responsible for the connection point; and

(ii) the connection point connects a small generating unit classified as a market generating unit to the national grid.

3.15.8A Funding of compensation for market suspension pricing schedule periods

(a) AEMO must, in accordance with the intervention settlement timetable, calculate the market suspension compensation recovery amount being the sum of:

(1) the total of the compensation payable by AEMO to Market Suspension Compensation Claimants calculated in accordance with clauses 3.14.5A(d), 3.14.5B and 3.15.7B (as the case may be) for the provision of energy during a market suspension pricing schedule period; plus

(2) the total amount payable by AEMO to the independent expert pursuant to clause 3.12.3(c); less

(3) any administrative costs payable by Market Suspension Compensation Claimants pursuant to clause 3.14.5B(e).

(b) AEMO must, in accordance with the intervention settlement timetable, calculate a figure for each Market Customer in each region applying the following formula:

\[ MCP = \frac{E}{\sum E} \times \frac{RB}{\sum RB} \times CRA \]

where

MCP is the amount payable by a Market Customer pursuant to this clause 3.15.8A(b).

E is the sum of the Market Customer's adjusted gross energy amounts at each connection point for which the Market Customer is financially responsible in a region, determined in accordance with clauses 3.15.4 and 3.15.5, in respect of the trading intervals that occur during a market suspension pricing schedule period.
RB is the regional benefit determined by AEMO pursuant to paragraph (e).

CRA is the market suspension compensation recovery amount.

(c) If the figure calculated for a Market Customer under clause 3.15.8A(b) is negative, the Market Customer is liable to pay the absolute value of that amount to AEMO.

(d) If the figure calculated for a Market Customer under clause 3.15.8A(b) is positive, then the amount payable by the Market Customer to AEMO is deemed to be zero.

(e) AEMO must, as soon as practicable, determine the relative benefit each region received from the payment of compensation under clauses 3.14.5A and 3.14.5B (as the case may be). In determining the relative benefit each region received from the payment of such compensation, AEMO must take into account, where applicable, the reason the compensation was paid, the load at risk of not being supplied if the compensation was not paid or the extent of improvement in available energy reserves in the region, capability to control voltage in the region and capability to control power system frequency within the region, and any other relevant matters.

(f) AEMO must, in accordance with the intervention settlement timetable, calculate for each market ancillary service the subject of a direction, the "ancillary service compensation recovery amount" being:

1. the total of the compensation payable by AEMO to Market Suspension Compensation Claimants calculated in accordance with clauses 3.14.5A(d), 3.14.5B and 3.15.7B (as the case may be) for the provision of market ancillary services during a market suspension pricing schedule period; plus

2. the total amount payable by AEMO to the independent expert pursuant to clause 3.12.3(c); less

3. any administrative costs payable by Market Suspension Compensation Claimants pursuant to clause 3.14.5B(e).

(g) The trading amount must be calculated as follows:

1. subject to clause 3.15.8A(g)(2) and (3) AEMO must use the appropriate formula set out in clause 3.15.6A(c8), (c9), (d), (e), (f), (g), (h) or (i) depending on which market ancillary service was provided during a market suspension pricing schedule period;

2. TNSCASP, TSRP, RTCRSP, RTCLSP or TSFCAS (as applicable) in the relevant formula is equal to the ancillary service compensation recovery amount for the relevant ancillary service in respect of that market suspension pricing schedule period; and

3. if TCE, TGE, TSGE, AGE, ATCE, ATGE, ATSGE or AAGE is used in the relevant formula, then the words 'the trading interval' in the definitions of those terms in the formula are to be read as 'all of the trading intervals within the market suspension pricing schedule period.
in which the Market Suspension Compensation Claimant provided market ancillary services.

3.15.9 Reserve settlements

(a) AEMO's costs incurred in contracting for the provision of reserves are to be met by fees imposed on Market Customers in accordance with this clause 3.15.9.

(b) AEMO must, in accordance with the intervention settlement timetable, calculate:

(1) the aggregate of the amounts payable by AEMO under reserve contracts in respect of the relevant billing period;

(2) any amounts determined as payable by AEMO:

(i) by the independent expert under clause 3.12.3 in respect of an AEMO intervention event that is an exercise of the RERT during the relevant billing period; or

(ii) as a result of a scheduled generating unit, scheduled network service or scheduled load under a scheduled reserve contract being dispatched or generating units or loads under an unscheduled reserve contract being activated, in respect of the relevant billing period; and

(3) the aggregate of the amounts receivable by AEMO under the Rules in respect of reserve contracts during the relevant billing period.

(c) Separate amounts must be calculated under paragraph (b):

(1) for reserve contracts entered into by AEMO specifically in respect of the Market Participant's region in accordance with paragraph (d); and

(2) for reserve contracts other than those entered into for and allocated to a specific region or regions.

(d) Where either:

(1) without the intervention in the market of AEMO a region would otherwise, in AEMO's reasonable opinion, fail to meet the minimum power system security standards or the reliability standard; or

(2) a region requires a level of power system reliability or reserves which, in AEMO's reasonable opinion, exceeds the level required to meet the reliability standard,

then AEMO must recover its net liabilities, or distribute its net profits, under the terms of reserve contracts entered into to meet these requirements, from or to the Market Customers in that region in accordance with paragraph (e).

(e) In respect of reserve contracts entered into by AEMO, AEMO must calculate in relation to each Market Customer for each region in respect of each billing period a sum determined by applying the following formula:
\[
MCP = \frac{E \times RRC}{\sum E}
\]

where:

MCP is the amount payable by a Market Customer for a region in respect of a billing period;

E is the sum of all that Market Customer's adjusted gross energy amounts in a region (the "relevant region") in each trading interval which occurs between 0800 hours and 2000 hours (EST) on a business day in the billing period excluding any loads in that region in respect of which the Market Customer submitted a dispatch bid for any such trading interval;

RRC is the total amount payable by AEMO under reserve contracts which relate to the relevant region in the billing period as agreed under clause 3.20.3(f); and

\(\sum E\) is the sum of all amounts determined as "E" in accordance with this paragraph (e) in respect of that region.

(f) A Market Customer is liable to pay AEMO an amount equal to the sum calculated under paragraph (e) in respect of that Market Customer.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(g) Operational and administrative costs incurred by AEMO in arranging for the provision of reserves, other than its liabilities under the terms of the reserve contracts into which it has entered, are to be recovered by AEMO from all Market Participants as part of the fees imposed in accordance with rule 2.11.

(h) For the purposes of clause 3.15.19, a re-determination by a panel established under clause 3.12.2 is to be taken to be an agreement between AEMO and each of the Market Participants and Scheduled Generators.

3.15.10 Administered price cap or administered floor price compensation payments

(a1) In this clause 3.15.10:

**cost recovery region** means the region in which:

(1) the dispatch price was set by the administered price cap or administered floor price; or

(2) the ancillary service price was set by the administered price cap,

in the eligibility period.

**eligibility period** has the same meaning as in clause 3.14.6(a).

(a) If the AEMC awards compensation to a Scheduled Generator, Non-Scheduled Generator, Market Participant, Scheduled Network Service Provider or
Ancillary Service Provider under clause 3.14.6, then AEMO must determine an amount which shall be payable by each Market Customer who purchased electricity from the spot market in the cost recovery region.

(b) AEMO shall determine the amounts payable for each eligibility period by each of the Market Customers referred to in clause 3.15.10(a) as follows:

\[
\frac{APC \times E_i}{\sum E_i}
\]

where

APC is the total amount of any compensation payments awarded by the AEMC to Scheduled Generators, Non-Scheduled Generators, Market Participants, Scheduled Network Service Providers or Ancillary Service Providers in respect of that eligibility period in accordance with clause 3.14.6.

E_i is the sum of all of the Market Customer's adjusted gross energy amounts, determined in accordance with clauses 3.15.4 and 3.15.5, in respect of each trading interval in the eligibility period and each connection point for which the Market Customer is financially responsible in the cost recovery region i.

\[\sum E_i\] is the sum of all amounts determined as "E_i" in accordance with this clause 3.15.10 for all Market Customers in the cost recovery region.

(c) Within 25 business days of being notified by the AEMC that compensation is to be paid to a Scheduled Generator, Non-Scheduled Generator, Market Participant, Scheduled Network Service Providers or Ancillary Service Provider in accordance with clause 3.14.6, AEMO shall include in statements provided under clauses 3.15.14 and 3.15.15 separate details of any amounts payable by or to Market Participants as determined in accordance with this clause 3.15.10.

3.15.10A Goods and services tax

(a) In this clause 3.15.10A:

"GST" has the meaning given in the GST Act; and

"GST Act" means the A New Tax System (Goods and Services Tax) Act 1999 (C'th);

"supply" and "taxable supply" each have the meaning given in the GST Act,

and the definition of "supply" in Chapter 10 does not apply.

(b) Despite anything else in the Rules, Participant fees, spot prices, adjustments for directions, reserve settlements, administered price cap compensation payments, system security direction settlements, re-allocation transactions, compensation, interest, settlements residues, ancillary services settlements, settlements residue distributions (including auction proceeds), auction expense fees and other prices, fees, charges and amounts payable to or by AEMO, the AER or the AEMC in respect of supplies under the Rules exclude GST. Accordingly:
(1) where a **Registered Participant** makes a taxable supply to **AEMO**, the **AER** or the **AEMC** under or in connection with the **Rules** on or after 1 July 2000, **AEMO**, the **AER** or the **AEMC** (as applicable) must also pay the **Registered Participant** making the supply an additional amount equal to the consideration payable for the supply multiplied by the applicable GST rate;

(2) where **AEMO**, the **AER** or the **AEMC** makes a taxable supply to a **Registered Participant** under the **Rules** on or after 1 July 2000, the **Registered Participant** must also pay **AEMO**, the **AER** or the **AEMC** (as applicable) an additional amount equal to the consideration payable for the supply multiplied by the applicable GST rate; and

**Note**

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(3) **AEMO** must include in **preliminary statements**, **final statements**, **routine revised statements**, **special revised statements**, **statements and invoices** issued under the **Rules** the additional amounts contemplated by clauses 3.15.10A(b)(1) and (2).

(c) However, if the additional amount paid or payable to a **Registered participant**, **AEMO**, the **AER** or the **AEMC** under clause 3.15.10A(b) in respect of a taxable supply differs from the actual amount of GST payable by or to the **Registered Participant**, **AEMO**, the **AER** or the **AEMC** (as applicable) under the GST Act in respect of the relevant supply, then adjustments must be made in accordance with clause 3.15.19 so as to ensure the additional amount paid under this clause in respect of the supply is equal to the actual amount of GST payable under the GST Act in respect of the supply.

### 3.15.10B Restriction contract amounts

(a) If clause 3.12A.7(g) applies then **AEMO** must include in the next statement provided under clauses 3.15.14 and 3.15.15 immediately after the end of the relevant **mandatory restriction period** separate details of amounts payable:

(1) by **Market Customers** in the relevant **region** in which the **mandatory restrictions** apply an amount equal to:

\[
EMCP = RSA \times \left(\frac{AGE}{AAGE}\right)
\]

Where:

- **EMCP** is the payment to be made by **Market Customers** to **AEMO**.
- **RSA** is the **restriction shortfall amount**.
- **AGE** is the **adjusted gross energy** of a **Market Customer** in that **region** for the **mandatory restriction period** expressed in MWh.
AAGE is the aggregate of the adjusted gross energy of all Market Customers in that region for the mandatory restriction period expressed in MWh;

(2) by Scheduled Generators and Scheduled Network Service Providers to AEMO in accordance with clause 3.12A.7(a); and

(3) the amounts payable by AEMO to the Scheduled Generators or Scheduled Network Service Providers pursuant to accepted restriction offers.

(b) Immediately upon the later of the publication of the independent expert’s final report in accordance with clause 3.12A.7(i)(8) and the determination of a dispute resolution panel pursuant to clause 3.12A.7(m), if any, AEMO must include in the next statements provided under clauses 3.15.14 and 3.15.15 separate details of any amounts payable:

(i) by a Market Customer equal to the amount as determined in accordance with clause 3.12A.7(g)(i) less the amount determined in accordance with clause 3.15.10B(a)(1), if such number is positive together with interest on such amount calculated by applying the bank bill rate on the date of this statement for the period from the date of the statement referred to in clause 3.15.10B(a) to the date of this statement under clause 3.15.10B(b); and

(ii) to a Market Customer equal to the amount determined in accordance with clause 3.15.10B(a)(1) less the amount determined in accordance with clause 3.12A.7(g)(i), if such number is positive together with interest on such amount calculated by applying the bank bill rate on the date of this statement for the period from the date of the statement referred to in clause 3.15.10B(a) to the date of this statement under clause 3.15.10B(b).

(c) If clauses 3.12A.7(f) or 3.12A.7(h) apply then AEMO must include in the next statement provided under clauses 3.15.14 and 3.15.15 immediately after the end of the relevant mandatory restriction period separate details of any amounts payable:

(i) by or to Market Customers as determined in accordance with clauses 3.12A.7(e) or 3.12A.7(h) respectively;

(ii) by Scheduled Generators and Scheduled Network Service Providers to AEMO in accordance with clause 3.12A.7(a); and

(iii) the amounts payable by AEMO to the Scheduled Generators or Scheduled Network Service Providers pursuant to all accepted restriction offers.

3.15.10C Intervention and Market Suspension Pricing Schedule Period Settlements

(a) AEMO must include in the final statements provided under clause 3.15.15 for a billing period in which one or more intervention price trading intervals occurred:
for each Affected Participant and Market Customer in relation to the relevant AEMO intervention event the amount calculated pursuant to clause 3.12.2(c);

(2) for each Directed Participant in relation to the relevant AEMO intervention event the amount calculated pursuant to clause 3.15.7(c) or clause 3.15.7A(a) by application of clause 3.15.7A(e), as the case may be;

(3) for each Market Customer in relation to an AEMO intervention event that is a direction, the amount calculated pursuant to clause 3.15.8(b) by application of clause 3.15.8 mutatis mutandis provided that the amount for the purposes of:

(i) clause 3.15.8(a)(1)(i) shall be the total amount payable to AEMO by Affected Participants and Market Customers calculated pursuant to clause 3.12.2(c);

(ii) clause 3.15.8(a)(1)(ii) shall be the amount calculated in accordance with that clause;

(iii) clause 3.15.8(a)(2)(i) shall be the total amount payable by AEMO to Affected Participants and Market Customers calculated pursuant to clause 3.12.2(c);

(iv) clause 3.15.8(a)(2)(ii) shall be the sum of the total amount payable by AEMO to Directed Participants calculated pursuant to clause 3.15.7(c) and 3.15.7A(a) by application of 3.15.7A(e); and

(v) clause 3.15.8(a)(2)(iii) shall be zero;

(4) for each Market Customer, Market Generator and Market Small Generation Aggregator in relation to an AEMO intervention event that is a direction an amount calculated pursuant to clause 3.15.8(e) by application of clause 3.15.8 mutatis mutandis provided that for the purposes of clause 3.15.8(f)(2) TNSCASP, TSRP, RTCRSP, RTCLSP and TSFCAS shall be the total compensation payable by AEMO for the relevant ancillary service calculated in accordance with clause 3.15.7(c) or clause 3.15.7A(a) by application of clause 3.15.7A(e), as the case may be; and

(4A) for each Market Customer in relation to an AEMO intervention event that is an exercise of the RERT, the amounts calculated pursuant to clause 3.15.9(b)(1), (b)(2)(ii) and (b)(3), and clause 3.15.9(e).

(a1) AEMO must include in the final statement provided under clauses 3.15.14 and 3.15.15 for a billing period in which a market suspension pricing schedule period occurred:

(1) for each Market Suspension Compensation Claimant in relation to that market suspension pricing schedule period:

(i) the amount calculated in accordance with clauses 3.14.5A(d), 3.14.5B and 3.15.7B (as the case may be); and
(ii) any administrative fees payable under clause 3.14.5B(e); and

(2) for each Market Customer in relation to that market suspension pricing schedule period, the amount payable pursuant to clause 3.15.8A(c).

(b) AEMO must include in each statement it provides under clause 3.12.1(a) following a final determination of all total amounts payable or receivable by it pursuant to clauses 3.12.2, 3.14.5A, 3.14.5B, 3.15.7(a), 3.15.8, 3.15.8A and 3.15.9, separate details of the amount:

(1) receivable by each Directed Participant pursuant to clause 3.15.7(a) less the amount, if any, paid to that Directed Participant pursuant to clause 3.15.10C(a)(2);

(1A) receivable by each Market Suspension Compensation Claimant pursuant to clauses 3.14.5A(b) and 3.14.5B (as the case may be);

(2) receivable by each Affected Participant or Market Customer pursuant to clause 3.12.2:

(i) less the amount paid to that Affected Participant or Market Customer, in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(1), if any; or

(ii) plus the amount paid by that Affected Participant or Market Customer in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(1), if any;

(3) payable by each Affected Participant or Market Customer pursuant to clause 3.12.2:

(i) less the amount paid by that Affected Participant or Market Customer, in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(1), if any; or

(ii) plus the amount paid to that Affected Participant or Market Customer in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(1), if any;

(4) receivable by each Market Customer pursuant to clause 3.15.8(b):

(i) less the amount paid to that Market Customer in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(3), if any; or

(ii) plus the amount paid by that Market Customer in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(3), if any;

(5) payable by each Market Customer pursuant to clause 3.15.8(b) or clause 3.15.9(e):

(i) less the amount paid by that Market Customer in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(3), if any; or
(ii) plus the amount paid to that Market Customer in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(3), if any;

(6) if an Affected Participant or Market Customer is not entitled to any compensation pursuant to clause 3.12.2, the amount:

(i) receivable by that person equal to the amount paid by that person pursuant to clause 3.15.10C(a); or

(ii) payable by that person equal to the amount paid to that person pursuant to clause 3.15.10C(a);

(7) payable by each Market Customer, Market Generator and Market Small Generation Aggregator equal to:

(i) the amount payable by the Market Customer, Market Generator or Market Small Generation Aggregator, as the case may be, pursuant to clause 3.15.8(e) by application of clause 3.15.8 mutatis mutandis provided that for the purposes of clause 3.15.8(f)(2) TNSCASP, TSRP, RTCRSP, RTCLSP and TSFCAS shall be the total compensation payable by AEMO for the relevant ancillary service calculated in accordance with clause 3.15.7A(a); less

(ii) the amount paid by the Market Customer, Market Generator or Market Small Generation Aggregator, as the case may be, in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(4); and

(8) payable by Registered Participants pursuant to clause 3.15.8(g).

(c) If on application by the AER a court determines, in relation to a direction, that a Directed Participant has breached clause 4.8.9(c2) then:

(1) the Directed Participant shall not be entitled to, and must repay, any compensation plus interest pursuant to clauses 3.15.7, 3.15.7A and 3.15.7B, in relation to that direction; and

(2) the AER must forward to AEMO a written notice of the court's determination.

(3) AEMO must include in the first relevant statement it provides under clauses 3.15.14 and 3.15.15 following receipt of the notice from the AER issued pursuant to clause 3.15.10C(c)(2) separate details of:

(i) an amount payable to AEMO by the Directed Participant equal to the total compensation received by that Directed Participant in accordance with clauses 3.15.7, 3.15.7A and 3.15.7B plus interest on that total compensation computed at the average bank bill rate for the period from the date of payment of such amount to the Directed Participant until the date of that first statement;

(ii) an amount payable by AEMO to each relevant Market Customer calculated by applying clause 3.15.8(b) mutatis mutandis except that:
(A) MCP shall equal the amount receivable by the Market Customer; and

(B) CRA shall equal that part of the amount, including interest, calculated pursuant to clause 3.15.10C(c)(3)(i) attributable to the provision of energy by the Directed Participant; and

(iii) an amount payable by AEMO to each relevant Market Customer, Market Generator and Market Small Generation Aggregator calculated by applying clause 3.15.8(f)(2) mutatis mutandis except that:

(A) all trading amounts determined by this clause 3.15.10C(c)(3)(iii) shall be positive; and

(B) TNSCAS, TSRP, RTCRSP, RTCLSP, and TSFCAS shall all be an amount equal to that part of the amount, including interest, calculated pursuant to clause 3.15.10C(c)(3)(i) attributable to the provision of the relevant ancillary service.

3.15.11 Reallocation transactions

(a) A reallocation transaction is a transaction undertaken with the consent of two Market Participants and AEMO, under which AEMO credits one Market Participant with a positive trading amount in respect of a trading interval, in consideration of a matching negative trading amount debited to the other Market Participant in respect of the same trading interval.

(b) Reallocation transactions may be of any type permitted in the reallocation procedures.

(c) A reallocation transaction is initiated by a reallocation request lodged with AEMO by or on behalf of two Market Participants.

(d) A reallocation request must:

(1) contain the information required by the reallocation procedures; and

(2) be lodged with AEMO in accordance with the reallocation procedures and the timetable for reallocation requests as published by AEMO from time to time (the reallocation timetable).

(e) Upon receipt of a reallocation request AEMO must register the reallocation request within the time specified in the reallocation procedures and the reallocation timetable and may impose conditions on that registration as contemplated by the reallocation procedures.

(f) After a reallocation request has been registered in respect of two Market Participants, AEMO may deregister the reallocation request if:

(1) the prudential requirements are not satisfied by either of those Market Participants;
either of the Market Participants fails to comply with any conditions imposed by AEMO in respect of the reallocation request at the time it was registered;

(3) both Market Participants notify AEMO in accordance with the reallocation procedures that they require the reallocation request to be terminated; or

(4) a default event occurs in respect of either of the Market Participants and AEMO exercises its powers under paragraph (l).

(g) Deregistration of a reallocation request prevents reallocation transactions occurring in respect of all the trading intervals that occur after the time of deregistration.

(h) AEMO must not deregister a reallocation request under paragraph (f) otherwise than in accordance with the reallocation procedures.

(i) The Market Participants may agree to reverse the effect of a registered reallocation request by lodging a new reallocation request in accordance with the reallocation procedures and the reallocation timetable.

(j) AEMO must include details of reallocation transactions in the settlement statements issued to all parties to those reallocation transactions.

(k) Where there is a registration of a reallocation request in respect of a trading interval and that trading interval has occurred, a reallocation transaction occurs in accordance with that reallocation request.

(l) If a default event occurs in relation to a party to a reallocation request when one or more of the trading intervals specified in the reallocation request has not occurred, AEMO may deregister the reallocation request by notice given at any time whilst the default event is subsisting.

(m) The deregistration under paragraph (l) is effective immediately upon AEMO notifying both parties to a reallocation request of the deregistration and the deregistration:

(1) is effective for all trading intervals commencing after the time specified in the notice, and notwithstanding that the default event may be subsequently cured; and

(2) prevents the completion of the requested reallocation transactions in the trading intervals that commence at or after the time specified in the deregistration notice.

(n) In addition to any other right AEMO may exercise following a default event, upon deregistration of a reallocation request AEMO may redetermine the maximum credit limit and trading limit for either or both of the parties to the reallocation request, having regard to the deregistration that has occurred.

3.15.11A Reallocation procedures

(a) AEMO must develop and publish procedures in accordance with the Rules consultation procedures, to enable Market Participants to create and record
reallocate requests and reallocation transactions in accordance with clause 3.15.11 in respect of electricity trading transactions other than those conducted through the market and/or establish mutual indemnification arrangements with other operators of markets for electricity-based trading (the reallocation procedures).

(b) AEMO may, from time to time and in accordance with the Rules consultation procedures, amend or replace the reallocation procedures.

(c) Paragraph (b) does not apply to amendments to the reallocation procedures that are of a minor or administrative nature and AEMO may make such amendments at any time.

(d) NEMMCO must develop and publish the first reallocation procedures by 1 January 2008 and there must be such procedures available at all times after that date.

(e) AEMO is not required to meet its obligations under paragraph (a) in any way which increases AEMO's risks in the collection of moneys owed to it in accordance with any provisions of the Rules.

### 3.15.12 Settlement amount

(a) Subject to clause 3.15.12(b), for each billing period AEMO must calculate a net settlement amount for each Market Participant by aggregating the trading amounts resulting for each Market Participant from each transaction in respect of each trading interval occurring in that billing period together with Participant fees determined in accordance with rule 2.11 and any other amounts payable or receivable by the Market Participants in that billing period under this Chapter 3. The settlement amount will be a positive or negative dollar amount for each Market Participant.

(b) AEMO may calculate an estimate of the net settlement amount for each Market Participant (the "estimated settlement amount") if, within the time provided for the giving of preliminary statements in accordance with clause 3.15.14, AEMO is prevented from calculating the net settlement amount in accordance with clause 3.15.12(a) by factors which are beyond the control of AEMO and which deprive AEMO of the relevant data required to calculate the net settlement amount (the "relevant data"), including:

1. a failure of:

   i. metering data processing;

   ii. communications; or

   iii. the settlements processing system; and

2. any other events or circumstances which prevent the calculation of the actual net settlement amount by AEMO.

(c) AEMO must develop the principles and the process to be applied in calculating the estimated settlement amount, and make any necessary modifications to those principles and that process, in accordance with the Rules consultation process.
3.15.13 Payment of settlement amount

Where the settlement amount for a Market Participant is negative the absolute value of the settlement amount is an amount payable by the Market Participant to AEMO pursuant to clause 3.15.15. Where the settlement amount for a Market Participant is positive the settlement amount is an amount receivable by the Market Participant from AEMO pursuant to clause 3.15.15, subject to the provisions of clause 3.15.22.

3.15.14 Preliminary statements

(a) Subject to clause 3.15.14(b), within 5 business days after the end of each billing period, AEMO must give each Market Participant a draft of the statement to be given to the Market Participant under clause 3.15.15 together with supporting data relating to the transactions in that billing period and the prices at which electricity was bought and sold by the Market Participant.

(b) If AEMO calculates an estimated settlement amount in accordance with clause 3.15.12(b), AEMO must:

(1) when giving a preliminary statement in accordance with this clause 3.15.14, provide a detailed report to affected Market Participants setting out the basis and calculations used for its estimation; and

(2) if requested to do so by affected Market Participants, consult with those Market Participants to ascertain whether or not any adjustments are required to the estimated settlement amount prior to the giving of a final statement.

3.15.15 Final statements

(a) No later than 18 business days after the end of each billing period, AEMO must give to each Market Participant a final statement stating the amounts payable by the Market Participant to AEMO or receivable by the Market Participant from AEMO (subject to clause 3.15.22) in respect of the relevant billing period.

(b) Unless AEMO has used an estimated settlement amount in accordance with clause 3.15.12, the statements issued under this clause 3.15.15 must include supporting data for all amounts payable or receivable.

3.15.15A Use of estimated settlement amounts by AEMO

(a) Subject to clause 3.15.15A(b), if AEMO calculates an estimated settlement amount in accordance with clause 3.15.12(b), then clauses 3.15.13, 3.15.14 and 3.15.15 will have effect mutatis mutandis by applying the estimated settlement amount in place of a settlement amount for a Market Participant for the purposes of those clauses.

(b) If AEMO receives relevant data:

(1) after it has given the preliminary statement in accordance with clause 3.15.14 but before giving a final statement, then it must adjust the estimated settlement amount accordingly for the purposes of preparing the final statement; or
within 60 days after it has given a final statement to which the relevant data relates, then AEMO must adjust the relevant estimated settlement amount accordingly and issue a revised statement in accordance with clause 3.15.19(a).

3.15.16 Payment by market participants

On the 20th business day after the end of a billing period, or 2 business days after receiving a statement under clause 3.15.15, whichever is the later, and in accordance with the timetable each Market Participant must pay to AEMO in cleared funds the net amount stated to be payable by that Market Participant in that statement whether or not the Market Participant continues to dispute the net amount payable.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

3.15.17 Payment to market participants

Subject to clause 3.15.22 on the day on which AEMO is to be paid under clause 3.15.16, AEMO must pay to each Market Participant in cleared funds the net amount stated to be payable to that Market Participant in the relevant statement given to it under clause 3.15.15.

3.15.18 Disputes

(a) In the event of a dispute between a Market Participant and AEMO concerning either the net amount (including any estimated settlement amount) stated in a preliminary statement provided under clause 3.15.14 to be payable by or to it or the supporting data, they must each use reasonable endeavours to resolve the dispute within 15 business days of the end of the relevant billing period.

(b) Disputes in respect of final statements or the supporting data provided with them in accordance with clause 3.15.15 must be raised within 6 months of the relevant billing period.

(c) Disputes raised under this clause 3.15.18:

(1) can only be raised by a Market Participant or AEMO issuing a written notice of dispute in the form prescribed by AEMO's DMS and otherwise in accordance with rule 8.2;

(2) must be resolved by agreement or pursuant to rule 8.2; and

(3) are, for the purpose of this clause, deemed to have been raised on the day AEMO receives the written notice of dispute.

(d) A Market Participant that may be materially affected by the outcome of a dispute under clause 3.15.18 may be joined to that dispute by the Adviser on request by that Market Participant or by AEMO.

3.15.19 Revised Statements and Adjustments

(a) Where a dispute about a final statement has been either resolved by agreement between AEMO and the relevant Market Participant ("the Disputant") or
determined under rule 8.2 and an adjustment to the settlement amount stated in the disputed final statement is required, or an adjustment is required under clause 3.15.10A, AEMO must:

(1) recalculate the settlement amount for that Market Participant and each other Market Participant who received a final statement for the relevant billing period:

   (i) in accordance with the applicable procedures set out in the Rules and,

   (ii) taking into account the adjustment;

(2) if the adjustment is required as a result of a dispute and the recalculated settlement amount for the Disputant is between 95% and 105% of the relevant settlement amount:

   (i) calculate for each Market Participant the amount by which the relevant settlement amount must be adjusted to be equal to the recalculated settlement amount after taking into account any routine or special revised statement; and

   (ii) for each Market Participant include that amount in the next routine revised statement given to those Market Participants for the relevant billing period practicable and if there is no routine revised statement, in accordance with clauses 3.15.19(a)(3)(ii) and (iii).

(3) if the adjustment is required under clause 3.15.10A, or the adjustment is required as a result of a dispute and the recalculated settlement amount for the Disputant is less than 95% or more than 105% of the relevant settlement amount:

   (i) calculate for each Market Participant the amount by which the relevant settlement amount must be adjusted to be equal to the recalculated settlement amount after taking into account any routine or special revised statement;

   (ii) give each Market Participant a special revised statement for the relevant billing period in addition to any routine revised statement given under clause 3.15.19(b); and

   (iii) give each Market Participant a notice advising of the reason why a settlement statement was given by AEMO under clause 3.15.19(a)(3).

(b) For each billing period AEMO must give each Market Participant a routine revised statement approximately 20 weeks after the relevant billing period and approximately 30 weeks after the relevant billing period. Each routine revised statement must recalculate the Market Participant's settlement amount for that billing period:

(1) taking into account all amended metering data, amended trading amounts, amended Participant fees and any other amounts payable or receivable by Market Participants under this Chapter 3; and
(2) using the most recent version of AEMO’s settlement calculation software applicable to that billing period.

c) Each special and routine revised statement issued under this clause must:

(1) state the revised settlement amount for the relevant billing period;

(2) be issued in accordance with the revised statement policy;

(3) be issued with revised supporting data for the transactions for the relevant billing period (except in the case of a special revised statement dealing with an adjustment required under clause 3.15.10A) and must include supporting data for all amounts payable or receivable.

d) If AEMO has issued a routine revised statement or special revised statement (the revised statement) to a Market Participant in respect of a billing period (the "original billing period"), AEMO must include in the next final statement to the Market Participant issued not less than 8 business days after the revised statement (the "next statement"):

(1) the amount necessary to put the Market Participant in the position it would have been in at the time payment was made under clause 3.15.16 or 3.15.17 (as applicable) in respect of the final statement for the original billing period, if the original revised statement had been given as the final statement for the billing period, but taking into account any adjustments previously made under this clause 3.15.19 as a result of any other routine revised statement or special revised statement in relation to the original billing period; and

(2) interest on the amount referred to in clause 3.15.19(d)(1) computed at the average bank bill rate for the period from the date on which payment was required to be made under clauses 3.15.16 and 3.15.17 in respect of the final statement for the original billing period to the date on which payment is required to be made under those clauses in respect of the next statement.

e) AEMO must develop and publish a policy for routine and special revised statements. AEMO may amend the policy at any time. AEMO must develop and amend the policy in accordance with the Rules consultation procedures. The policy must include:

(1) a calendar setting out when routine revised statements will be issued by AEMO;

(2) the process by which the calendar can be amended or varied by AEMO and the process by which Market Participants are notified of any amendment and variation; and

(3) a transitional process by which AEMO will issue any outstanding routine revised statement.
3.15.20 Payment of adjustments

(a) Adjustments made and interest calculated and included in a final statement under clause 3.15.19 must be paid as part of the settlement amount shown on that final statement in accordance with either clause 3.15.16 or 3.15.17.

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(b) Clause 3.15.22 does not apply to a final statement to the extent that the final statement incorporates an adjustment amount and interest pursuant to clause 3.15.19.

(c) Disputes in respect of adjustment amounts and interest incorporated into a final statement pursuant to clause 3.15.19 must be:

1. raised within 20 business days of the date of the final statement that they are incorporated into; and
2. resolved by agreement or pursuant to the dispute resolution procedures set out in rule 8.2.

3.15.21 Default procedure

(a) Each of the following is a default event in relation to a Market Participant:

1. the Market Participant does not pay money due for payment to AEMO under the Rules by the appointed time on the due date;
2. AEMO does not receive payment in full of any amount claimed by AEMO under any credit support in respect of a Market Participant, within 90 minutes after the due time for payment of that claim;
3. the Market Participant fails to provide credit support required to be supplied under the Rules by the appointed time on the due date;
4. it is unlawful for the Market Participant to comply with any of its obligations under the Rules or any other obligation owed to AEMO or it is claimed to be so by the Market Participant;
5. it is unlawful for any credit support provider in relation to the Market Participant to comply with any of its obligations under the Rules or any other obligation owed to AEMO or it is claimed to be so by that credit support provider;
6. an authorisation from a government body necessary to enable the Market Participant or a credit support provider which has provided credit support for that Market Participant to carry on their respective principal business or activities ceases to be in full force and effect;
7. the Market Participant or a credit support provider which has provided credit support for that Market Participant ceases or threatens to cease to carry on its business or a substantial part of its business;
(8) the Market Participant or a credit support provider which has provided credit support for that Market Participant enters into or takes any action to enter into an arrangement (including a scheme of arrangement), composition or compromise with, or assignment for the benefit of, all or any class of their respective creditors or members or a moratorium involving any of them;

(9) the Market Participant or a credit support provider which has provided credit support for that Market Participant states that it is unable to pay from its own money its debts when they fall due for payment;

(10) a receiver or receiver and manager is appointed in respect of any property of the Market Participant or a credit support provider which has provided credit support for that Market Participant;

(11) an administrator, provisional liquidator, liquidator, trustee in bankruptcy or person having a similar or analogous function is appointed in respect of the Market Participant or a provider of credit support for the Market Participant;

(12) an order is made, or a resolution is passed, for the winding up of the Market Participant or a provider of credit support for the Market Participant;

(13) A notice under section 601AB(3) of the Corporations Act is given to the Market Participant or a credit support provider which has provided credit support for that Market Participant unless the registration of that Market Participant or credit support provider is reinstated under section 601AH of the Corporations Act;

(14) the Market Participant or a credit support provider which has provided credit support for that Market Participant dies or is dissolved unless such notice of dissolution is discharged;

(15) the Market Participant or a credit support provider which has provided credit support for that Market Participant is taken to be insolvent or unable to pay its debts under any applicable legislation.

(b) Where a default event has occurred in relation to a Market Participant, AEMO may:

(1) issue a "default notice" specifying the alleged default and requiring the Market Participant to remedy the default by 1.00 pm (Sydney time) the next day following the date of issue of the default notice; and/or

(2) if it has not already done so, make claim upon any credit support held in respect of the obligations of the Market Participant for such amount as AEMO determines represents the amount of any money actually or contingently owing by the Market Participant to AEMO pursuant to the Rules.

(c) If a default event that is not an external administration default event is not remedied by 1.00 pm (Sydney time) the next day following the date of issue of the default notice or any later deadline agreed to in writing by AEMO, or
if AEMO receives notice from the **defaulting Market Participant** that it is not likely to remedy the default, then AEMO may issue a **suspension notice**. For the avoidance of doubt, nothing in paragraphs (c1) to (c6) limits AEMO's discretion in relation to issuing a suspension notice under this paragraph (c).

(c1) If an **external administration default event** is not remedied by 1.00 pm (Sydney time) the next day following the date of issue of the default notice or any later deadline agreed to in writing by AEMO, or if AEMO receives notice from the **defaulting Market Participant** that it is not likely to remedy the default, then AEMO must:

(1) issue a **suspension notice** to the **defaulting Market Participant** under which the **Market Participant** is suspended from all activities in relation to each category of **Market Participant** for which it is registered (each a **registration category**); or

(2) make a **non-suspension decision** in relation to all activities in relation to each **registration category** of the **Market Participant**; or

(3) issue a **suspension notice** to the **defaulting Market Participant** under which the **Market Participant** is suspended from some specified activities or **registration categories** of the **Market Participant** and make a **non-suspension decision** in relation to the activities or **registration categories** that are not the subject of the suspension notice issued under this subparagraph (3).

(c2) AEMO may only make a **non-suspension decision** in relation to any activities or **registration categories** of a **defaulting Market Participant** if:

(1) the external administrator has requested or consented to the **non-suspension decision** and has undertaken that the **defaulting Market Participant** will meet its relevant liabilities under the **Rules**; and

(2) taking into account the following matters, AEMO considers that the **defaulting Market Participant** should not be suspended in relation to that activity or **registration category**:

(i) the likelihood that the **defaulting Market Participant** will comply with its obligations under the **Rules** relevant to that registration;

(ii) in the case where the **defaulting Market Participant** is a **Market Generator**, **Market Small Generator Aggregator** or **Market Network Service Provider**, the potential impact of the suspension of that registration on the **reliability** of the **power system**;

(iii) in the case where the **Market Participant** is not in a category referred to in subparagraph (ii), the potential impact of the suspension of that registration on the **reliability** of the **power system** if AEMO considers that matter to be relevant; and

(iv) any other matters AEMO considers relevant to the making of the **non-suspension decision**.
(c3) **AEMO** may make a **non-suspension decision** conditional on the **defaulting Market Participant** continuing to satisfy specified obligations including, without limitation, conditions relating to compliance with the **Rules**.

(c4) A **defaulting Market Participant** must comply with any conditions specified in a **non-suspension decision**.

(c5) Promptly after making a **non-suspension decision** in relation to a **defaulting Market Participant**, **AEMO** must:

1. notify the **defaulting Market Participant** of its decision and any conditions that must be satisfied by the **defaulting Market Participant** if the **non-suspension decision** is to remain in effect; and
2. publish a notice specifying:
   
   i. that an **external administration default event** has occurred in respect of the **defaulting Market Participant**;
   
   ii. that **AEMO** has made a **non-suspension decision** in accordance with paragraph (c2);
   
   iii. the **registration categories** of the **defaulting Market Participant** affected by the **non-suspension decision** and the activities (or subset of activities) of those **registration categories** that are the subject of the **non-suspension decision**; and
   
   iv. that despite the **non-suspension decision**, **AEMO** may issue a **suspension notice** in relation to the **registration categories** and activities covered by the **non-suspension decision** in the circumstances set out in subparagraphs (c6)(1) to (3).

(c6) Despite paragraph (c), if at any time after the issue of a **non-suspension decision**:

1. **AEMO** considers that the **defaulting Market Participant** has failed to satisfy any of the conditions that apply to the **non-suspension decision**;
2. a further **default event** occurs in respect of the **defaulting Market Participant**; or
3. **AEMO** is not satisfied that the **defaulting Market Participant** will meet its relevant liabilities under the **Rules**;

then **AEMO** may immediately issue a **suspension notice** to the **defaulting Market Participant** in relation to the **registration categories** and activities of the **defaulting Market Participant** covered by that **non-suspension decision**.

(d) At the time of issue of a **suspension notice**, or as immediately thereafter as is practicable, **AEMO** must forward a copy of the **suspension notice** to the **AER** and to each **Market Participant** which is **financially responsible** for a **transmission network connection point** to which is allocated a **connection point** for which the **defaulting Market Participant** is financially responsible.
(e) AEMO must lift a suspension notice if the default event is remedied and there are no other circumstances in existence which would entitle AEMO to issue a suspension notice.

(f) AEMO must issue a public announcement that the Market Participant has been suspended from the market including details of the extent of the suspension, simultaneously with, or at any time after, a suspension notice is issued. AEMO must issue a public notice promptly after a suspension notice is lifted.

(g) From the time of suspension that AEMO stipulates in a suspension notice to a Market Participant the Market Participant is ineligible to trade or enter into any transaction in the market to the extent specified in the notice, until such time that AEMO notifies the Market Participant and all other Market Participants of the date and time that the suspension has been lifted.

(h) The defaulting Market Participant must comply with a suspension notice.

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(i) Following the issue of a suspension notice, AEMO may do all or any of the following to give effect to the suspension notice:

(1) reject any dispatch bid or dispatch offer submitted by the defaulting Market Participant;

(2) withhold the payment of any amounts otherwise due to the defaulting Market Participant under the Rules; or

(3) deregister or reject any reallocation request to which the defaulting Market Participant is a party.

The issue of a suspension notice which has not been lifted is a "relevant disconnection event" (ie. an event for which a Registered Participant's market loads may be disconnected) within the meaning of section 63(2) of the National Electricity Law.

3.15.22 Maximum total payment in respect of a billing period

(a) For the purposes of this clause 3.15.22, the maximum total payment in respect of a billing period is equal to:

(1) the aggregate of the energy trading amounts as determined in accordance with clause 3.15.6 and reallocation amounts as determined in accordance with clause 3.15.11 received by AEMO from Market Participants in accordance with clause 3.15.16 in respect of that billing period in accordance with the timetable on the latest date for payment by Market Participants as described in clause 3.15.16 (called the payment date),

plus
(2) if there is one or more Market Participants in default, the aggregate amount which AEMO is able to obtain from the credit support and apply from security deposits provided by the Market Participants in default under rule 3.3 on the payment date in accordance with the timetable, minus

(3) if there is one or more Market Participants in default, the aggregate of amounts payable to AEMO by those Market Participants in respect of that billing period in accordance with clause 3.15.16 but not received in accordance with the timetable on the latest date for payment as described in clause 3.15.16 (called the payment date), plus

(4) if there is one or more Market Participants in default, the aggregate of energy trading amounts and reallocation amounts payable to AEMO under clauses 3.15.6 and 3.15.11 by those Market Participants in respect of that billing period in accordance with clause 3.15.16 but not received in accordance with the timetable on the latest date for payment as described in clause 3.15.16 (called the payment date), minus

(5) inter-regional and intra-regional settlements surpluses as determined or allocated by AEMO in accordance with the procedure established under clause 3.6.5.

(b) The maximum amount which AEMO is required to pay to Market Participants in respect of spot market transactions or reallocation transactions in respect of a billing period is equal to the maximum total payment in respect of that billing period.

(c) If the maximum total payment in respect of a billing period is not sufficient to meet the aggregate of the net amounts payable by AEMO to each of the Market Participants to whom payments are to be made in relation to spot market transactions or reallocation transactions in respect of the billing period (the aggregate payment due), then the aggregate amount payable by AEMO to each relevant Market Participant for any of these transactions in respect of that billing period shall be reduced by applying the following formula:

\[ AAP = SAP \times \frac{A}{B} \]

where:

AAP is the reduced amount actually payable by AEMO to the relevant Market Participant in respect of the relevant billing period;

SAP is the net amount that would have been payable to the relevant Market Participant in respect of spot market transactions or reallocation transactions in respect of the relevant billing period but for the application of this clause 3.15.22;
A is the maximum total payment in respect of the billing period; and

B is the aggregate payment due in respect of the billing period.

(d) This clause 3.15.22 applies notwithstanding any other provision of this Chapter.

3.15.23 Maximum total payment in respect of a financial year

(a) If in a financial year a Market Participant suffers a reduction in payment under clause 3.15.22 the provisions of this clause shall apply to adjust the payments made to each Market Participant in the financial year.

(b) The ratio of the overall shortfall to the sum of the aggregate payments due for a financial year shall be determined by the following formula:

\[ SS = \frac{A_1 + C}{B_1} \]

where:

SS is the ratio of the overall shortfall to the sum of the aggregate payments due for the financial year;

A_1 is the aggregate of the As referred to in clause 3.15.22, being the maximum total payment in respect of each billing period forming the financial year;

B_1 is the aggregate of the Bs referred to in clause 3.15.22, being the aggregate payment due in respect of each billing period forming the financial year; and

C is the aggregated late payments and credit support receipts in respect of defaulting Market Participants in the financial year plus interest received on such amounts under clause 3.15.25.

(c) The shortfall for a financial year shall be applied pro rata to each Market Participant in the financial year by applying the following formula:

\[ SS_1 = (SAP_1 SS) - AAP_1 \]

where:

SS_1 is the shortfall or surplus payable by or due to the Market Participant in respect of the financial year;

SAP_1 is the aggregate of the SAPs referred to in clause 3.15.22 being the net amounts due to the Market Participant in respect of each billing period forming the financial year;

SS is determined in accordance with clause 3.15.23(b); and

AAP_1 is the aggregate of the AAPs referred to in clause 3.15.22, being the reduced amounts payable to the Market Participant in respect of each billing period forming the financial year.

(d) AEMO must issue a statement stating the SS1 amount payable to or receivable by the Market Participant in respect of this clause 3.15.23. If SS1 is positive, such that an amount is payable by AEMO it will credit the sum to the Market
Participant's account in the next billing period. If SS1 is negative, such that an amount is payable by a Market Participant, AEMO will at its discretion either debit the sum to the Market Participant in the next billing period or issue an invoice for immediate payment of the amount.

### 3.15.24 Compensation for reductions under clause 3.15.23

(a) If:

1. a Market Participant suffers a reduction in payment under clause 3.15.23; and
2. an amount is recovered by AEMO after the end of a financial year from the person whose default gave rise (in whole or in part) to the reduction, in respect of the default,

then, subject to clause 3.15.24(c), the Market Participant is entitled to be paid by AEMO out of the amount recovered the amount of the reduction suffered and interest for receiving the amount of the reduction later than it would otherwise have done.

(b) The amount of the interest payable under clause 3.15.24(a) is to be determined in each case by AEMO.

(c) If the amount recovered from the person whose default gave rise to the reduction is not sufficient to pay all Market Participants the amounts to which they are entitled under clause 3.15.23 then the amount recovered is to be distributed amongst them pro rata according to the reductions suffered. Such distribution to be made at any time following the end of a financial year.

### 3.15.25 Interest on overdue amounts

(a) A Market Participant or AEMO must pay interest on any unpaid moneys due and payable by it under this Chapter.

**Note**

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(b) The rate of interest payable under this clause 3.15.25 is the bank bill rate calculated as simple interest on a daily basis from the date payment was due, up to and including the date of payment, with interest compounding monthly on the last day of each month whilst the unpaid moneys remain outstanding.

### 3.16 Participant compensation fund

#### 3.16.1 Establishment of Participant compensation fund

(a) AEMO must continue to maintain, in the books of the corporation, a fund called the Participant compensation fund for the purpose of paying compensation to Scheduled Generators, Semi-Scheduled Generators and Scheduled Network Service Providers as determined by the dispute resolution panel for scheduling errors under this Chapter 3.
(b) \(AEMO\) must pay to the \textit{Participant compensation fund} that component of \textit{Participant fees} under rule 2.11 attributable to the \textit{Participant compensation fund}.

(c) The funding requirement for the \textit{Participant compensation fund} for each \textit{financial year} is the lesser of:

(1) \$1,000,000; and

(2) \$5,000,000 minus the amount which \(AEMO\) reasonably estimates will be the balance of the \textit{Participant compensation fund} at the end of the relevant \textit{financial year}.

(d) The \textit{Participant compensation fund} is to be maintained by \(AEMO\) and is the property of \(AEMO\).

(e) Any interest paid on money held in the \textit{Participant compensation fund} will accrue to and form part of the \textit{Participant compensation fund}.

(f) \(AEMO\) must pay from the \textit{Participant compensation fund} all income tax on interest earned by the \textit{Participant compensation fund} and must pay from the \textit{Participant compensation fund} all bank account debit tax, financial institutions duty and bank fees in relation to the \textit{Participant compensation fund}.

(g) Upon ceasing to be a \textit{Scheduled Generator} or a \textit{Semi-Scheduled Generator}, the relevant \textit{Generator} is not entitled to a refund of any contributions made to the \textit{Participant compensation fund}.

(h) Upon ceasing to be a \textit{Scheduled Network Service Provider}, a \textit{Scheduled Network Service Provider} is not entitled to a refund of any contributions made to the \textit{Participant compensation fund}.

### 3.16.2 Dispute resolution panel to determine compensation

(a) Where a \textit{scheduling error} occurs, a \textit{Market Participant} may apply to the \textit{dispute resolution panel} for a determination as to compensation under this clause 3.16.2.

(b) Where a \textit{scheduling error} occurs, the \textit{dispute resolution panel} may determine that compensation is payable to \textit{Market Participants} and the amount of any such compensation payable from the \textit{Participant compensation fund}.

(c) A determination by the \textit{dispute resolution panel} as to compensation must be consistent with this clause 3.16.2.

(d) A \textit{Scheduled Generator} or \textit{Semi-Scheduled Generator} who receives an instruction in respect of a \textit{scheduled generating unit} or \textit{semi-scheduled generating unit} (as the case may be) to operate at a lower level than the level at which it would have been instructed to operate had the \textit{scheduling error} not occurred, will be entitled to receive in compensation an amount determined by the \textit{dispute resolution panel}.

(e) A \textit{Scheduled Network Service Provider} who receives an instruction in respect of its \textit{scheduled network services} to transfer less \textit{power} on the \textit{scheduled network servicing area}.
network service than it would have been instructed to transfer had the scheduling error not occurred, will be entitled to receive in compensation an amount determined by the dispute resolution panel.

(f) A Scheduled Generator or Semi-Scheduled Generator who receives a dispatch instruction in respect of a generating unit to operate at a level consistent with a dispatch offer price (with reference to the relevant regional reference node) which is higher than the dispatch price, due to the operation of clause 3.9.2B, is entitled to receive in compensation an amount determined by the dispute resolution panel.

(g) A Scheduled Network Service Provider who receives an instruction in respect of its scheduled network services to transfer power on the scheduled network service consistent with a network dispatch offer price but receives less net revenue than would be expected under clause 3.8.6A(f) due to adjustment of the spot price for a trading interval under clause 3.9.2B, is entitled to receive in compensation an amount determined by the dispute resolution panel.

(h) In determining the level of compensation to which Market Participants are entitled in relation to a scheduling error, the dispute resolution panel must:

(1) Where the entitlement to compensation arises under clause 3.16.2(f), determine compensation on the basis of the actual loading level and not the dispatch instruction applicable to the relevant scheduled generating unit or semi-scheduled generating unit for that dispatch interval;

(2) Where the entitlement to compensation arises under clause 3.16.2(g), determine compensation on the basis of the actual loading level and not the dispatch instruction applicable to the relevant scheduled network service for that dispatch interval;

(3) Use the spot price as determined under rule 3.9, including any spot prices that have been adjusted in accordance with clause 3.9.2B;

(4) Take into account the current balance of the Participant compensation fund and the potential for further liabilities to arise during the year;

(5) Recognise that the aggregate liability in any year in respect of scheduling errors cannot exceed the balance of the Participant compensation fund that would have been available at the end of that year if no compensation payments for scheduling errors had been made during that year.

(i) The manner and timing of payments from the Participant compensation fund are to be determined by the dispute resolution panel.

(j) To the maximum extent permitted by law, AEMO is not liable in respect of a scheduling error except out of the Participant compensation fund as contemplated in this clause 3.16.2.
3.17 [Deleted]

3.18 Settlements Residue Auctions

3.18.1 Settlements residue concepts

(a) An auction participation agreement is an agreement between AEMO and an eligible person concerning the participation by the eligible person in auctions.

(b) A settlements residue distribution agreement or SRD agreement is an agreement between AEMO and an eligible person entered into following an auction under which:

(1) in all cases:

(i) AEMO agrees to issue a SRD unit to an eligible person;

(ii) the eligible person agrees to pay AEMO the auction clearing price for the SRD unit;

(2) where a secondary trading decision is made under clause 3.18.3A(a):

(i) the eligible person has a right to offer a SRD unit in future auctions;

(ii) if the SRD unit is cleared in a future auction, AEMO is required to cancel the SRD unit; and

(iii) the cancellation of a SRD unit by AEMO pursuant to subparagraph (ii) does not terminate the underlying SRD agreement between AEMO and the eligible person under which that SRD unit was issued, and, for the avoidance of doubt, does not affect the obligation of:

(A) the eligible person to pay AEMO for the SRD unit issued to it under the SRD agreement; or

(B) AEMO to pay the eligible person for cancellation of the SRD unit under the SRD agreement,

in accordance with this rule 3.18 and the auction rules.

(c) For the purposes of this rule 3.18:

(1) all the regulated interconnectors between any 2 adjacent regions are deemed to constitute a single interconnector; and

(2) the deemed interconnector referred to in paragraph (1) between any 2 adjacent regions consists of 2 directional interconnectors, one involving a transfer from region A to region B, and one involving a transfer from region B to region A.

(d) Subject to clause 3.18.4, AEMO must use the portion of the settlements residue allocated to a directional interconnector remaining after applying the relevant jurisdictional derogations under chapter 9 (as determined by applying the principles referred to in clause 3.6.5) to:
(1) distribute settlements residue to relevant eligible persons holding SRD units; and

(2) recover the auction expense fees.

(e) Where a person registered as a Trader is required to appoint an agent for the purposes of rule 2.5A(c)(2), AEMO and the Trader must ensure that the auction participation agreement and the SRD agreement entered into by the Trader and its agent provides that the Trader and the agent are jointly and severally liable in relation to the obligations of the Trader under those agreements.

3.18.2 Auctions and eligible persons

(a) AEMO may conduct auctions to determine which eligible persons will be issued with SRD units under SRD agreements with AEMO.

(b) AEMO may only enter into a SRD agreement with a person (called an eligible person) who satisfies the following criteria:

(1) the person is a Market Customer, a Generator or a Trader, or a person seeking to be eligible for registration as a Trader under rule 2.5A; and

(2) the person satisfies any criteria specified in the auction rules, which criteria must comply with paragraph(g).

(c) Auctions must be conducted in accordance with this rule 3.18 and the auction rules.

(d) AEMO may, with the approval of the settlement residue committee, suspend, or remove a suspension, on conducting auctions for one or more directional interconnectors for a specified period if AEMO believes it is not practicable to conduct those auctions or those auctions are unlikely to lead to the entry into of SRD agreements in relation to all of the settlements residues being auctioned.

(e) AEMO may, after complying with the Rules consultation procedures, cease conducting auctions.

(f) If AEMO takes any action under paragraph (d) or (e), then it must post a notice on its website specifying the action taken as soon as practicable after taking it.

(g) Any criteria specified in the auction rules concerning persons with whom AEMO may enter into SRD agreements must be consistent with paragraph (b), not exclude any persons other than those specified in subparagraphs (1) – (6) below and must exclude the persons specified in subparagraphs (1), (2), (5) and (6) below:

(1) persons who have not entered into an auction participation agreement;

(2) Transmission Network Service Providers;

(3) [Deleted]

(4) persons:
(i) who have previously defaulted on payment obligations under an *auction participation agreement* or a *SRD agreement*; or

(ii) in relation to whom a *default event* has occurred; 

(5) any person who *AEMO* considers is acting on behalf of or in concert with a person described in subparagraphs (1) or (2); 

(5a) any person who *AEMO* considers is acting on behalf of or in concert with a person described in subparagraph (4); or

(6) any person who would be a *retail client* as defined in section 761GA of the Corporations Act 2001 (Cth), if they entered into an *SRD agreement* with *AEMO*.

(h) [Deleted]

### 3.18.3 Auction rules

(a) In all cases, *AEMO* must develop rules (called *auction rules*) which set out:

1. additional criteria which a person must satisfy to be an *eligible person* (which must include, without limitation, criteria requiring the person to enter into an *auction participation agreement* with *AEMO* in a form satisfactory to *AEMO*);
2. the procedures for conducting *auctions* and the timing of *auctions*;
3. the mechanism for calculating the *auction* clearing price in respect of each *directional interconnector* for each *auction*;
4. the mechanism for calculating *auction expense fees*;
5. the procedures and timetable for billing and settling *auction amounts*; and

6. the standard form of any *auction participation agreement* referred to in subparagraph (1).

(a1) Where a secondary trading decision is made under clause 3.18.3A(a), *AEMO* must amend the *auction rules* to set out:

1. a right for an *eligible person* that holds a *SRD unit* to offer that *SRD unit* in another *auction* in accordance with the *auction rules*;
2. if an *eligible person* offers a *SRD unit* in an *auction*, a right for *AEMO* to cancel that *SRD unit* in accordance with the *SRD agreement* and the *auction rules*;
3. the requirements for cancellation of *SRD units* by *AEMO*; and
4. mechanisms for calculating and distributing *auction amounts*;
5. a mechanism for calculating and determining the margin referred to in clause 3.18.4A(b), which must take into account the relevant prices at which the *eligible person* offers *SRD units* in an *auction* as well as the *auction clearing prices* at which the *eligible person* received *SRD units* in previous *auctions*; and
(6) the procedures *AEMO* will follow to obtain and manage the margins referred to in clause 3.18.4A.

(b) In developing and amending the *auction rules*, *AEMO* must give effect to the following principles:

1. [Deleted]

2. to the extent reasonably practicable, an *auction* must be structured in a way that maximises the value of the relevant *settlements residue*;

3. the price for each *SRD unit* to be paid by *eligible persons* will be the same for all *SRD units* cleared in the same *auction* and will be equal to the *auction* clearing price in respect of the *directional interconnector* for the *auction*; and

4. enhancing competition and efficiency by promoting interstate trade in electricity.

(c) *AEMO* must make the *auction rules* available to *Registered Participants* and to any other person who requests a copy.

(d) *AEMO* may amend the *auction rules*:

1. at any time, with the approval of the *settlement residue committee* and in accordance with the *Rules consultation procedures*; or

2. if *AEMO* has consulted to the extent practicable in the circumstances in relation to the proposed amendment, the amendment has the support of at least three quarters of the members of the *settlement residue committee*, and *AEMO* considers the amendment is urgent.

### 3.18.3A Secondary trading of SRD units

(a) *AEMO* may, with the approval of the *settlement residue committee*, decide to implement secondary trading of *SRD units* by *eligible persons* in accordance with this rule 3.18 and the *auction rules* at a specified date (*secondary trading decision*).

(b) Before the date specified under paragraph (a), *AEMO* must amend the *auction rules* in accordance with clause 3.18.3(d)(1) to include the requirements specified in clause 3.18.3(a1).

### 3.18.4 Proceeds and fees

(a) *AEMO* must distribute to the relevant *Network Service Provider*:

1. subject to clauses 3.6.5(a)(4) and 3.6.5(a)(4A) and paragraph (a1), the *auction* clearing price for each *SRD unit* received by an *eligible person* in an *auction* in accordance with the *auction rules*; and

2. subject to paragraphs (b) and (c), any portion of the *settlements residue* allocated to the *directional interconnector* in respect of which a *SRD unit* has not been issued under a *SRD agreement*,
in accordance with the principles in clause 3.6.5 in relation to the allocation and distribution of settlements residue attributable to regulated interconnectors.

(a1) Where a secondary trading decision is made under clause 3.18.3A(a), AEMO must pay an eligible person the auction clearing price for each SRD unit that is offered by that eligible person and subsequently cancelled by AEMO pursuant to clause 3.18.1(b)(2)(ii) and in accordance with the relevant SRD agreement and the auction rules.

(b) The costs and expenses incurred by AEMO in establishing and administering the arrangements contemplated by this rule 3.18, in conducting auctions under this rule 3.18 and in entering into and administering auction participation agreements and SRD agreements under this rule 3.18 will be recovered from settlements residue by way of auction expense fees.

(c) The auction expense fees are to be developed by AEMO in accordance with the auction rules and approved by the settlement residue committee, and recovered as follows:

(1) to the extent the settlements residue is distributed to eligible persons under clause 3.18.1(d), in accordance with the auction rules; and

(2) to the extent the settlements residue is distributed to Network Service Providers under clause 3.18.4(a)(2), as if the settlements residue was being distributed to eligible persons in accordance with the auction rules.

(d) The auction expense fees for an auction are to be published before the auction.

(e) Eligible persons and AEMO must pay auction amounts in accordance with the auction rules, and, for the avoidance of doubt, amounts payable by eligible persons to AEMO under SRD agreements and any amounts payable by AEMO to eligible persons under SRD agreements will not be regarded as amounts payable under the Rules for the purposes of rule 3.15.

Note

This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(f) AEMO may nominate an electronic funds transfer facility for the purposes of paying auction amounts and, if it does so, eligible persons, Network Service Providers and AEMO must use that facility for paying and receiving auction amounts.

3.18.4A Secondary trading proceeds and margin

(a) This clause 3.18.4A applies where a secondary trading decision is made under clause 3.18.3A(a).

(b) When an eligible person offers a SRD unit in an auction, the eligible person must provide a margin to AEMO at the same time as it offers the SRD unit, in accordance with the requirements of the auction rules and the SRD agreement.
Clause 3.18.3(a1)(5) requires the auction rules to set out a mechanism for calculating and determining the margin.

(c) If an eligible person provides a margin under paragraph (b) and subsequently that eligible person's SRD agreement or auction participation agreement is terminated by AEMO, then AEMO must apply the margin provided by that eligible person to:

1. any outstanding amounts owing to AEMO by that eligible person; or
2. any amounts that would have been owing to AEMO by that eligible person under SRD agreements had the SRD agreements or auction participation agreement not been terminated,

in accordance with this rule 3.18 and the auction rules.

(d) If the full amount payable by AEMO to eligible persons for cancellation of SRD units pursuant to clause 3.18.4(a1) is less than the amount available to AEMO from auction proceeds provided to AEMO by eligible persons (shortfall) then AEMO must recover that shortfall:

1. first, from the auction proceeds payable to the relevant Network Service Provider under clause 3.18.4(a)(1); and
2. if the amount under paragraph (d)(1) is insufficient, then AEMO must recover the remaining amount that could not be recovered in accordance with clause 3.6.5, as if references to negative settlements residue amounts were references to the shortfall.

(e) If an eligible person's SRD agreement or auction participation agreement is terminated by AEMO, then any SRD units which that person held immediately prior to the relevant agreement being terminated may be made available by AEMO in another auction.

### 3.18.5 Settlement residue committee

(a) AEMO must establish a settlements residue committee.

(b) The functions of the settlement residue committee are to:

1. approve any suspension, or removal of a suspension, imposed by AEMO on the conducting of auctions;
2. approve proposed amendments to the auction rules developed by AEMO;
3. monitor, review and report on the auctions conducted by AEMO under this rule 3.18; and
4. approve the costs and expenses incurred by AEMO in conducting auctions under this rule 3.18 and in entering into and administrating auction participation agreements and SRD agreements under this rule 3.18.

(c) The settlement residue committee is to consist of:
(1) an employee of AEMO appointed by AEMO, who will act as chairman of the committee;

(2) a person representing Generators;

(3) a person representing Market Customers;

(4) a person representing Transmission Network Service Providers;

(5) a person representing Traders;

(6) a person appointed jointly by the relevant Ministers of the participating jurisdictions; and

(7) a person appointed by the AEMC to represent retail customers.

(d) AEMO may remove the person referred to in clause 3.18.5(c)(1) at any time for any reason.

(e) The persons referred to in clauses 3.18.5(c)(2), (3), (4) and (5) must be appointed and removed by AEMO after consultation with the class of Registered Participants the person is to represent, and AEMO must:

(1) appoint a person agreed to by at least one third in number of the relevant class of Registered Participants; and

(2) commence consultation on the removal of such a person if requested to do so by a member of the relevant class of Registered participants, and must remove that person if so agreed by at least one third in number of the relevant class of Registered Participants.

(f) The Ministers of the participating jurisdictions acting jointly may remove the person referred to in clause 3.18.5(c)(6) at any time for any reason.

(g) The AEMC may remove the person referred to in clause 3.18.5(c)(7) at any time for any reason.

(h) A person holds office as a member of the settlement residue committee until that person:

(1) resigns from office;

(2) if the person is the person referred to in clause 3.18.5(c)(1), is removed from office by AEMO in accordance with clause 3.18.5(d);

(3) if the person is a person referred to in clauses 3.18.5(c)(2), (3), (4) or (5), is removed from office by AEMO in accordance with clause 3.18.5(e)(2);

(4) if the person is the person referred to in clause 3.18.5(c)(6), is removed from office by the Ministers of the participating jurisdictions in accordance with clause 3.18.5(f); or

(5) if the person is the person referred to in clause 3.18.5(c)(7), is removed from office by the AEMC in accordance with clause 3.18.5(g),

and such a person is eligible for re-appointment.
(i) A person may resign as a member of the settlement residue committee by giving notice in writing to that effect to AEMO.

3.19 Market Management Systems Access Procedures

(a) AEMO may develop and publish Market Management Systems Access Procedures in consultation with Registered Participants in accordance with the Rules consultation procedures, which procedures will govern how Registered Participants, Metering Providers and Metering Data Providers can use the market management systems.

(b) AEMO may amend the Market Management Systems Access Procedures from time to time in consultation with Registered Participants in accordance with the Rules consultation procedures, and any such amendments must be published by AEMO.

(c) AEMO and all Registered Participants, Metering Providers and Metering Data Providers must comply with the Market Management Systems Access Procedures.

Note
This clause is classified as a civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

(d) A Registered Participant which complies with the Market Management Systems Access Procedures and promptly pays all relevant Participant fees as and when they fall due has a right to be connected to the market management systems.

(e) If a Registered Participant fails to comply with the Market Management Systems Access Procedures, AEMO must:

(1) notify that Registered Participant describing the nature of the breach; and

(2) at a time following notification of the breach by AEMO under clause 3.19(e)(1) determined by AEMO having regard to a balancing of the need to provide a Registered Participant with the opportunity to remedy the breach and the nature of the breach, notify the AER that the Registered Participant has breached the Market Management Systems Access Procedures.

3.20 Reliability and Emergency Reserve Trader

3.20.1 [Deleted]

3.20.2 Reliability and emergency reserve trader

(a) AEMO must take all reasonable actions to ensure reliability of supply and, where practicable, take all reasonable actions to maintain power system security by negotiating and entering into contracts to secure the availability of reserves under reserve contracts (reliability and emergency reserve trader or RERT) in accordance with:
(1) this rule 3.20;

(2) where relevant:

(i) clauses 1.11, 3.8.1, 3.8.14, 3.9.3, 3.12, 3.12A.5, 3.15.6, 3.15.9, 4.8.5A and 4.8.5B; and

(ii) any other provision of the Rules necessary to exercise the RERT;

(3) the RERT principles; and

(4) the RERT guidelines.

(b) AEMO must have regard to the following principles (RERT principles) in exercising the RERT under paragraph (a):

(1) actions taken should be those which AEMO reasonably expects, acting reasonably, to have the least distortionary effect on the operation of the market; and

(2) actions taken should aim to maximise the effectiveness of reserve contracts at the least cost to end use consumers of electricity.

(c) In having regard to the RERT principles, AEMO must have regard where relevant to the RERT guidelines.

3.20.3 Reserve contracts

(a) AEMO may enter into one or more contracts with any person in relation to the capacity of:

(1) scheduled generating units, scheduled network services or scheduled loads (being scheduled reserve contracts); and

(2) unscheduled reserves (being unscheduled reserve contracts).

(b) AEMO may determine to enter into reserve contracts to ensure that the reliability of supply in a region or regions meets the reliability standard for the region and, where practicable, to maintain power system security.

(c) AEMO must consult with persons nominated by the relevant participating jurisdictions in relation to any determination to enter into contracts under paragraph (b).

(d) AEMO must not enter into, or renegotiate, a reserve contract more than nine months prior to the date that AEMO reasonably expects that the reserve under that contract may be required to ensure reliability of supply and, where practicable, to maintain power system security. For the avoidance of doubt, AEMO may negotiate with potential tenderers in relation to reserve contracts at any time.

(e) Subject to paragraph (d), AEMO may:

(1) enter into reserve contracts; or

(2) renegotiate existing reserve contracts,

in addition to the contracts already entered into by AEMO under this rule 3.20.
(f) In entering into reserve contracts under paragraph (b) AEMO must agree with the relevant nominated persons referred to in paragraph (c) cost-sharing arrangements between the regions for the purpose of clause 3.15.9.

(g) If, at any time AEMO determines that it is necessary to commence contract negotiations for the provision of additional reserves, AEMO must publish a notice of its intention to do so.

(h) When contracting for the provision of scheduled reserves under scheduled reserve contracts, AEMO must not enter contracts in relation to capacity of generating units, scheduled network services or scheduled loads for which dispatch offers or dispatch bids have been submitted or are considered by AEMO to be likely to be submitted or be otherwise available for dispatch in the trading intervals to which the contract relates.

Terms and conditions of a contract

(i) If AEMO seeks to enter into a reserve contract with a Registered Participant then the Registered Participant must negotiate with AEMO in good faith as to the terms and conditions of the contract.

(j) AEMO may only enter into a reserve contract if the contract contains a provision that the other party to the contract has not and will not otherwise offer the reserve the subject of the contract in the market for the trading intervals to which the contract with AEMO relates except in accordance with the contract.

3.20.4 Dispatch pricing methodology for unscheduled reserve contracts

(a) Subject to paragraph (c), AEMO must develop in accordance with the Rules consultation procedures and publish details of the methodology it will use to request that generating units or loads under unscheduled reserve contracts be activated.

(b) AEMO may develop and publish the methodology developed in accordance with this clause 3.20.4 as part of the methodology AEMO is required to develop under clause 3.9.3(e).

(c) AEMO may make minor and administrative amendments to the methodology developed in accordance with this clause 3.20.4 without complying with the Rules consultation procedures.

3.20.5 AEMO's risk management and accounts relating to the reliability safety net

(a) AEMO may enter into insurance arrangements with an insurance provider with a view to minimising potential financial losses in respect of AEMO's RERT activities described in this rule 3.20.

(b) AEMO must ensure that it maintains in its books separate accounts relating to the RERT functions and powers granted to AEMO under this rule 3.20.
3.20.6 Reporting on RERT by AEMO

(a) If a scheduled generating unit, scheduled network service or scheduled load under a scheduled reserve contract with AEMO is dispatched or generating units or loads are activated under an unscheduled reserve contract, then AEMO must, as soon as practicable thereafter, publish a report detailing:

1. the circumstances giving rise to the need for the dispatch of scheduled reserves or activation of unscheduled reserves;
2. the basis on which it determined the latest time for that dispatch of scheduled reserves or activation of unscheduled reserves and on what basis it determined that a market response would not have avoided the need for the dispatch of scheduled reserves or the activation of unscheduled reserves;
3. the changes in dispatch outcomes due to the dispatch of scheduled reserves or activation of unscheduled reserves; and
4. the processes implemented by AEMO to dispatch the scheduled reserves or activate the unscheduled reserves,

and if applicable:

5. reasons why AEMO did not follow any or all of the processes set out in rule 4.8 either in whole or in part prior to the dispatch of scheduled reserves or the activation of unscheduled reserves; and
6. the basis upon which AEMO considered it impractical to set spot prices and ancillary service prices in accordance with clause 3.9.3(b).

(b) As soon as reasonably practicable after AEMO has, in accordance with clause 3.15.9, included the amounts arising under a reserve contract in a final statement provided under clause 3.15.15, AEMO must publish details of:

1. the payments under the reserve contract for the relevant billing periods; and
2. a breakdown of the recovery of those costs by each category of Market Customer, as determined by AEMO, in each region.

(c) Within 30 days of the end of each financial year in which AEMO has exercised the RERT, AEMO must publish a report detailing:

1. each occasion during the financial year on which it intervened to secure the availability of reserves;
2. each occasion during the financial year when a scheduled generating unit, scheduled network service or scheduled load under a scheduled reserve contract was dispatched or generating units or loads under an unscheduled reserve contract were activated; and
3. its costs and finances in connection with its RERT activities during the financial year according to appropriate accounting standards including profit and loss, balance sheet, sources and applications of funds.
3.20.7  **AEMO’s exercise of the RERT**

(a) Notwithstanding clauses 4.8.5A and 4.8.5B, if AEMO considers the latest time for exercising the RERT by:

(1) the dispatch of scheduled reserves it has available under scheduled reserve contracts; or

(2) the activation of unscheduled reserves it has available under unscheduled reserve contracts,

has arrived, AEMO may dispatch such scheduled reserves or activate such unscheduled reserves to ensure that the reliability of supply in a region or regions meets the reliability standard and, where practicable, to maintain power system security.

(b) AEMO must follow the relevant procedures in this rule 3.20 prior to dispatching a scheduled generating unit, scheduled network service or scheduled load the subject of a scheduled reserve contract or activating generating units or loads the subject of an unscheduled reserve contract unless it is not reasonably practicable to do so.

(c) Subject to paragraph (b), AEMO must only dispatch a scheduled generating unit, a scheduled network service or a scheduled load the subject of a scheduled reserve contract or activate generating units or loads the subject of an unscheduled reserve contract in accordance with the procedures developed pursuant to paragraph (e).

(d) In order to effect the dispatch of a scheduled generating unit, scheduled network service or scheduled load the subject of a scheduled reserve contract or the activation of generating units or loads the subject of an unscheduled reserve contract AEMO may:

(1) submit, update or vary dispatch bids or dispatch offers in relation to all or part of such a scheduled generating unit, scheduled network service or scheduled load which is the subject of a scheduled reserve contract; or

(2) change other inputs to the dispatch process to give effect to the dispatch of scheduled generating units, scheduled network services or scheduled loads the subject of a scheduled reserve contract or the activation of generating units or loads the subject of an unscheduled reserve contract.

(e) AEMO must develop, publish, and may amend from time to time, in accordance with the Rules consultation procedures, procedures for the exercise of the RERT under this rule 3.20 that take into account the RERT principles and RERT guidelines. These procedures must include measures to be adopted in order to reduce the possibility that generating units or loads likely to be activated under unscheduled reserve contracts are otherwise engaged at the time the unscheduled reserve contracts are entered into by AEMO.

(f) When exercising the RERT under this rule 3.20, AEMO must take into account the RERT guidelines.
3.20.8 RERT Guidelines

(a) For the purposes of this rule 3.20, the Reliability Panel must develop and publish guidelines (the RERT guidelines) for or with respect to:

(1) what information AEMO must take into account when deciding whether to exercise the RERT;

(2) the relevance of the RERT principles to the exercise of the RERT;

(3) the actions that AEMO may take to be satisfied that the reserve that is to be the subject of a reserve contract is not available to the market through any other arrangement;

(4) the process AEMO should undertake in contracting for reserves including the process for tendering for contracts for such reserves;

(4A) the process AEMO should undertake in contracting for reserves in relation to different notice situations specified in the RERT guidelines to ensure reliability of supply and, where practicable, to maintain power system security;

(5) any specific or additional assumptions about key parameters that AEMO must take into account in assessing the cost effectiveness of exercising the RERT;

(6) matters relevant to AEMO managing a portfolio of reserve contracts; and

(7) additional forecasts that AEMO should take into account prior to exercising the RERT.

(b) The Reliability Panel must develop, publish and amend from time to time, the RERT guidelines in accordance with clauses 8.8.3(d) – (l).

(c) The Reliability Panel must publish the first RERT guidelines by 30 November 2008 and there must be such guidelines in place at all times after that date.

3.20.9 [Deleted]

Schedule 3.1 Bid and Offer Validation Data

(a) The bid and offer validation data are the standard data requirements for verification and compilation of dispatch bids and dispatch offers on the trading day schedule.

(b) Scheduled Generators, Semi-Scheduled Generators and Market Participants must notify AEMO of their bid and offer validation data in accordance with this schedule 3.1 in respect of each of their scheduled loads, semi-scheduled generating units and scheduled generating units at least six weeks prior to commencing participation in the market.
(c) Scheduled Generators, Semi-Scheduled Generators and Market Participants must review their bid and offer validation data annually in accordance with the timetable advised by AEMO and provide details of any changes to AEMO.

(d) A Scheduled Generator, Semi-Scheduled Generator or Market Participant must notify AEMO of any proposed change to its bid and offer validation data in accordance with clause 3.13.3(h) at least six weeks prior to the date of the proposed change and any proposed change may be subject to audit at AEMO's request and must be consistent with AEMO's register of performance standards referred to in rule 4.14(n) in respect of the relevant plant.

(e) A copy of all changes to the data must be returned to each Scheduled Generator, Semi-Scheduled Generator and Market Participant for verification and resubmission by the Scheduled Generator, Semi-Scheduled Generator or Market Participant as necessary.

(f) [Deleted]

Scheduled Generating Unit Data:

<table>
<thead>
<tr>
<th>Data</th>
<th>Units of Measurement</th>
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<tbody>
<tr>
<td><strong>Power station information:</strong></td>
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<td>power station name</td>
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<td><strong>Scheduled generating unit information:</strong></td>
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<tr>
<td>Note:</td>
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<tr>
<td>Repeat the following items for each scheduled generating unit where there are two or more scheduled generating units in the power station.</td>
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</tr>
<tr>
<td>scheduled generating unit name</td>
<td></td>
</tr>
<tr>
<td>Note:</td>
<td></td>
</tr>
<tr>
<td>This may be the same name as the power station name when the power station has only one single or aggregated scheduled generating unit.</td>
<td></td>
</tr>
<tr>
<td>Dispatchable unit identifier</td>
<td></td>
</tr>
<tr>
<td>maximum generation of the scheduled generating unit, to which the scheduled generating unit may be dispatched.</td>
<td>MW (generated)</td>
</tr>
<tr>
<td>maximum ramp rate of the scheduled generating unit</td>
<td>MW/minute</td>
</tr>
</tbody>
</table>
### Semi-Scheduled Generating Unit Data:

<table>
<thead>
<tr>
<th>Data</th>
<th>Units of Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power station information:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>power station name</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Semi-scheduled generating unit information:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Note:</strong> Repeat the following items for each semi-scheduled generating unit where there are two or more semi-scheduled generating units in the power station.</td>
<td></td>
</tr>
<tr>
<td><strong>semi-scheduled generating unit name</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Note:</strong> This may be the same name as the power station name when the power station has only one semi-scheduled generating unit.</td>
<td></td>
</tr>
<tr>
<td><strong>Dispatchable unit identifier</strong></td>
<td></td>
</tr>
<tr>
<td><strong>maximum generation of the semi-scheduled generating unit, to which the semi-scheduled generating unit may be dispatched</strong></td>
<td>MW (generated)</td>
</tr>
<tr>
<td><strong>maximum ramp rate of the semi-scheduled generating unit</strong></td>
<td>MW/minute</td>
</tr>
</tbody>
</table>

### Scheduled Load Data:

<table>
<thead>
<tr>
<th>Data</th>
<th>Units of Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Load installation information:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>load installation name</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Scheduled load information:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Note:</strong> Repeat the following items for each scheduled load where there are two or more scheduled loads.</td>
<td></td>
</tr>
<tr>
<td><strong>scheduled load name</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Note:</strong> This may be the same name as the load installation name when the load installation has only one scheduled load.</td>
<td></td>
</tr>
<tr>
<td><strong>Dispatchable unit identifier</strong></td>
<td></td>
</tr>
<tr>
<td><strong>maximum load of the scheduled load, to which the scheduled load may be dispatched</strong></td>
<td>MW</td>
</tr>
<tr>
<td><strong>maximum ramp rate of the scheduled load</strong></td>
<td>MW/minute</td>
</tr>
</tbody>
</table>
Scheduled Network Service Data:

<table>
<thead>
<tr>
<th>Data</th>
<th>Units of Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>installation/link name</td>
<td></td>
</tr>
<tr>
<td><strong>Dispatchable Unit Identifier</strong></td>
<td></td>
</tr>
<tr>
<td>connection point identifiers for terminal nodes A and B</td>
<td></td>
</tr>
<tr>
<td>maximum power transfer capability to node A</td>
<td>MW</td>
</tr>
<tr>
<td>maximum power transfer capability to node B</td>
<td>MW</td>
</tr>
<tr>
<td>maximum ramp rate of power transfer capability of the installation</td>
<td>MW/minute</td>
</tr>
</tbody>
</table>

Ancillary Service Generating Unit and Ancillary Service Load Data:

<table>
<thead>
<tr>
<th>Data</th>
<th>Units of Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power station/load installation information:</strong></td>
<td></td>
</tr>
<tr>
<td>power station/load installation name</td>
<td></td>
</tr>
<tr>
<td><strong>Ancillary service generating unit and ancillary service load information</strong></td>
<td></td>
</tr>
<tr>
<td>Note: Repeat the following items for each dispatchable unit identifier where there are two or more of them in the power station/installation.</td>
<td></td>
</tr>
<tr>
<td>Unit/load name</td>
<td></td>
</tr>
<tr>
<td>Dispatchable unit identifier</td>
<td></td>
</tr>
<tr>
<td>market ancillary service*</td>
<td></td>
</tr>
<tr>
<td>maximum market ancillary service capacity*</td>
<td>MW</td>
</tr>
<tr>
<td>minimum enablement level*</td>
<td>MW</td>
</tr>
<tr>
<td>maximum enablement level*</td>
<td>MW</td>
</tr>
<tr>
<td>maximum lower angle*</td>
<td>Degrees</td>
</tr>
<tr>
<td>maximum upper angle*</td>
<td>Degrees</td>
</tr>
</tbody>
</table>

Note:
For those items marked with an asterisk, repeat the block of data for each market ancillary service offered.

Dispatch Inflexibility Profile:
[Deleted]

Aggregation Data:
[Deleted]
| Schedule 3.2 | [Deleted] |
| Schedule 3.3 | [Deleted] |