

# National Electricity Rules Version 28

## Status Information

This is a draft consolidation based on the latest electronically available version of the National Electricity Rules as at 16 April 2009.

This draft consolidated version of the National Electricity Rules includes the following amendments:

Draft National Electricity Amendment (Fully Co-optimised and Alternative Constraint Formulations) Rule 2009;

Draft National Electricity Amendment (Negative Inter-regional Settlements Residue Amounts) Rule 2009

Draft National Electricity Amendment (Congestion Information Resource) Rule 2009

This version of the National Electricity Rules only contains the Chapters of the National Electricity Rules that will be amended by these Rules.

This version of the National Electricity Rules is provided for information purposes only. The Australian Energy Market Commission does not guarantee the accuracy, reliability or completeness of this consolidated version. The official Draft National Electricity Amendment (Fully Co-optimised and Alternative Constraint Formulations) Rule 2009, Draft National Electricity Amendment (Negative Inter-regional Settlements Residue) Rule 2009, and Draft National Electricity Amendment (Congestion Information Resource) Rule 2009 are published separately on the website of the Australian Energy Market Commission.

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**CHAPTER 3**



## **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) *NEMMCO* clearing house and trading functions;
- (f) *market* information requirements and obligations;
- (g) the conditions and procedures for *market suspension*; and
- (h) *settlements*.

#### **3.1.2 [Deleted]**

#### **3.1.3 [Deleted]**

#### **3.1.4 Market design principles**

- (a) This Chapter is intended to give effect to the following market design principles:
  - (1) minimisation of *NEMMCO* 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;
  - (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) *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 *NEMMCO* and service providers should be used in preference to bilaterally negotiated arrangements;
  - (7) the power of direction to provide *ancillary services* as a last resort to ensure system security should not be affected by the competitive market arrangements;
  - (8) where arrangements require participants to pay a proportion of *NEMMCO* costs for *ancillary services*, charges should where possible be allocated to provide incentives to lower overall costs of the national electricity market. 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 *NEMMCO* to *dispatch* or procure an *ancillary service*, *NEMMCO* should be responsible for settlement of the service.
- (a1) *NEMMCO* must review, prepare and publish a report on:
- (1) **[Deleted]**
  - (2) the operation and effectiveness of the *spot market* for *market ancillary services* within the overall *central dispatch* and any recommendations for their improvement, including:
    - (i) simplification of the arrangements for the provision of *market ancillary services*; and
    - (ii) improving the determination of *market ancillary services* requirements;
  - (3) the potential future implementation of a usage market for *market ancillary services* whilst retaining an enabling market to assist *NEMMCO* with its obligations with respect to system security; and
  - (4) the provision of *network control ancillary services* including:
    - (i) a review of the responsibilities of *NEMMCO* and *Transmission Network Service Providers* for the provision of *reactive power support*;
    - (ii) a review of the formulation of those generic *network constraints* within *central dispatch* that are dependant on the provision of *network control ancillary services*; and
    - (iii) a program to assess the potential implementation of market mechanisms for the recruitment and *dispatch* of *NCAS*.

- (a2) In conducting the reviews under clause 3.1.4(a1), *NEMMCO* must:
- (1) seek and take account of the opinion of the *Reliability Panel* on matters to be considered in, and the draft conclusions of, the review set out in clause 3.1.4(a1)(1);
  - (2) **[Deleted]**
  - (3) *publish* a program for the conduct of the reviews within three months of the *market ancillary services commencement date*;
  - (4) take into account when setting the program of the reviews the need to balance the benefit of utilising the results of other reviews or *market* experience and the need to progress *market* development;
  - (5) use the *Rules consultation procedures* in conducting each review;
  - (6) *publish* a review outline and indicative timelines at the commencement of each review;
  - (7) complete each review and deliver to the *AEMC* a report of the findings and recommendations of the review within 12 months of the commencement of the review; and
  - (8) deliver to the *AEMC* within 3 months of the conclusion of each review any proposed *Rule* changes required to implement the recommendations of the review.
- (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 Trade Practices Act, 1974 and the Competition Codes of *participating jurisdictions*.

### **3.1.5 Time for undertaking action**

The provisions of clause 1.7.1(1) 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 NEMMCO's Market Responsibilities**

### **3.2.1 Market functions of NEMMCO**

- (a) *NEMMCO* must operate and administer the *market* in accordance with this Chapter.
- (b) *NEMMCO* must establish, maintain and *publish* a register of all current *Market Participants*.
- (c) *NEMMCO* must:

- (1) establish procedures for consultation with *Registered Participants* in respect of the manner in which *NEMMCO* fulfils its functions and obligations under the *Rules*; and
- (2) *publish* annually performance indicators to monitor *NEMMCO's* performance in respect of its *market* management functions.

### 3.2.2 Spot market

*NEMMCO* 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, *NEMMCO* 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) *NEMMCO* 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 Ancillary services function**

- (a) *NEMMCO* must determine the *market's* requirements for *non-market ancillary services* in accordance with rule 3.11.
- (b) *NEMMCO* must use reasonable endeavours to ensure adequate *non-market ancillary services* are available in accordance with rule 3.11.

### **3.2.5 [Deleted]**

### **3.2.6 Settlements**

*NEMMCO* 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;
- (b) not be under external administration (as defined in the Corporations Act) or under a similar form of administration under any laws applicable to it in any jurisdiction;
- (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 *NEMMCO* 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*;
- (b) is a guarantee or bank letter of credit in a form prescribed by *NEMMCO*;
- (c) is duly executed by the *Credit Support Provider* and delivered unconditionally to *NEMMCO*;
- (d) constitutes valid and binding unsubordinated obligations of the *Credit Support Provider* to pay to *NEMMCO* amounts in accordance with its terms which relate to obligations of the relevant *Market Participant* under the *Rules*; and
- (e) permits drawings or claims by *NEMMCO* to a stated certain amount.

### 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) *NEMMCO* 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 *NEMMCO*, 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 Moodys Investor Service Pty. Limited.
- (c) Any determination of *NEMMCO* 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 *NEMMCO* specifies by notice to the *Market Participants*.

### 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 *NEMMCO* in respect of the *Market Participant* is not less than the current *maximum credit limit* for that *Market Participant*.

### 3.3.6 Changes to credit support

- (a) If:
- (1) a *credit support* provided to *NEMMCO* 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 *NEMMCO* 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.

- (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 *NEMMCO* 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 *NEMMCO*).

### 3.3.7 Drawings on credit support

- (a) If *NEMMCO* 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 *NEMMCO* must notify the *Market Participant*.
- (b) If, as a result of *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* additional *credit support* complying with the requirements of this rule 3.3, such that the aggregate undrawn and valid *credit support* held by *NEMMCO* 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.

### 3.3.8 Maximum credit limit and prudential margin

- (a) *NEMMCO* must determine for each *Market Participant* a *maximum credit limit* and *prudential margin*.
- (b) The *maximum credit limit* for a *Market Participant* is a dollar amount determined by *NEMMCO* applying the principles set out in schedule 3.3, being an amount determined by *NEMMCO* on the basis of a *reasonable worst case* estimate of the aggregate payments for *trading amounts* (after *reallocation*) to be made by the *Market Participant* to *NEMMCO* over a period of up to the *credit period* applicable to that *Market Participant*.
- (c) The *prudential margin* for a *Market Participant* is a dollar amount to be determined by *NEMMCO* applying the principles set out in schedule 3.3, being an amount determined by *NEMMCO* on the basis of a *reasonable worst case* estimate of the aggregate of the expected *trading amount* and the *reallocation amount* owing by the *Market Participant* to *NEMMCO* in respect of the *reaction period*.
- (d) *NEMMCO* must *publish* details of the methodology used in determining *maximum credit limits* and *prudential margins*.
- (e) *NEMMCO* shall review the *maximum credit limit* and *prudential margin* of each *Market Participant* not less than once each year.
- (f) *NEMMCO* may change either or both of the *maximum credit limit* or *prudential margin* for a *Market Participant* at any time (whether by reason of an annual review or otherwise), provided that any change to the *maximum credit limit* or *prudential margin* will apply with effect from such time (not being earlier than the time of notification of the changed *maximum credit limit* or *prudential margin*, as the case may be, to the *Market Participant*) as *NEMMCO* specifies.
- (g) *NEMMCO* must notify the *Market Participant* of any determination or change under this clause 3.3.8 of that *Market Participant's maximum credit limit* or *prudential margin* (as the case may be) and, on request from that *Market Participant*, provide details of the basis for that determination or change, including the trading, price, volatility and *prospective reallocation* assumptions and the average *spot prices* and *ancillary service prices* and average *trading amounts*.

#### 3.3.8A Security Deposits

At any time, a *Market Participant* may provide a security deposit to *NEMMCO* 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 *NEMMCO* or *NEMMCO's* reasonable estimate of the *settlement amounts* for *billing periods* (where *final statements* have not been issued by *NEMMCO*).

**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 *NEMMCO* to the *Market Participant*.

### 3.3.10 Trading limit

The trading limit for a *Market Participant* is the dollar amount determined by *NEMMCO* on the basis of a *reasonable worst case* estimate by *NEMMCO* applying the principles in schedule 3.3 and determined 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 in accordance with clause 3.3.8(c).

**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*, *NEMMCO* 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* or *final statements* or another *interim statement*,

notwithstanding that the usual time for the issue of a *preliminary* 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 NEMMCO may exercise its powers under either or both of clauses 3.3.11(a)(1) or 3.3.11(a)(2).

- (b) NEMMCO 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 NEMMCO’s rights to issue a further *call notice* or *interim statement* on the same grounds that gave rise to NEMMCO 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 NEMMCO 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 NEMMCO 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) *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* to an increase in the *Market Participant's maximum credit limit* by an amount not less than the *call amount*, and provide to *NEMMCO* 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 *NEMMCO* 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 *NEMMCO*; or
  - (4) provide to *NEMMCO* 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 *NEMMCO* is not less than the *call amount*.
- (b) If *NEMMCO* gives a *call notice* to a *Market Participant* after noon (Sydney time), then *NEMMCO* 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), *NEMMCO* 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 *NEMMCO*:
  - (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 *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* under a particular *final statement* or *final statements*; and

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

If agreement is not reached between *NEMMCO* and the *Market Participant* under this clause, then *NEMMCO* has a discretion to apply the security deposit funds of that *Market Participant* in payment of moneys that the *Market Participant* owes *NEMMCO* 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 *NEMMCO* has a discretion as to which amounts owing to *NEMMCO* 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, *NEMMCO* 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 *NEMMCO* a security deposit, then *NEMMCO* 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 *NEMMCO* under *final statements* issued not later than the *final statement* for the *billing period* in which the security deposit was paid to *NEMMCO*. If, for any reason, *NEMMCO* has not fully applied such security deposit within this time, then *NEMMCO* must apply the remainder to amounts owing to *NEMMCO* 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 *NEMMCO* and *NEMMCO* reasonably considers that the *Market Participant* will not owe any money to *NEMMCO* in the future arising from that person's activities as a *Market Participant*,

then *NEMMCO* 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 *NEMMCO*. For this purpose, *NEMMCO* 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 NEMMCO 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 NEMMCO 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 NEMMCO where the *potential value* of that *transaction*, plus the *potential value* of all other *uncompleted transactions*, exceeds the *trading margin* for the *Market Participant*.
- (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 NEMMCO 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) *NEMMCO* 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 *VoLL* 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) *NEMMCO* 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 *VoLL* 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 *NEMMCO* 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 *NEMMCO* within 24 hours after *NEMMCO* has notified the *Market Participant* that additional *credit support* is required.
- (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, *NEMMCO* must consult with *Market Participants* and any other person *NEMMCO* considers appropriate.
- (b) *NEMMCO* is not required to meet its obligations under clause 3.3.19(a) in any way which increases *NEMMCO'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) *NEMMCO* 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) *NEMMCO* 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) *NEMMCO* must operate the *spot market* according to the *timetable* which must be approved by the *AEMC* and *published* by *NEMMCO* following compliance with the *Rules consultation procedures*.
- (b) If *NEMMCO* wishes to change the *timetable* at any time, it may do so following compliance with the *Rules consultation procedures*.

## 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 Abolition of Snowy region

- (a) In this clause 3.5.6:

**current *Regions Publication*** means the document published by *NEMMCO* entitled “List of Regional Boundaries and Marginal Loss Factors for the 2007/08 Financial Year”.

**New South Wales region** comprises the *region* as identified in the current *Regions Publication*.

**Snowy region** comprises the *region* as identified in the current *Regions Publication*.

**Victoria region** comprises the *region* as identified in the current *Regions Publication*.

- (b) Despite any other provision of the *Rules*, at 00:00 hours *EST* on 1 July 2008:
- (1) the Snowy *region* is abolished;
  - (2) the *regional reference node* known as the Murray 330kV node is abolished;
  - (3) the New South Wales *region* and the Victoria *region* are modified by the allocation of the *loads* and *generators* to each *region* as set out in clause 11.13.8; and
  - (4) the location of the *region* boundary between the New South Wales *region* and the Victoria *region* is as set out in clause 11.13.9.
- (c) For the avoidance of doubt:
- (1) the *regional reference node* (known as the Sydney West 330kV node) for the New South Wales *region*; and
  - (2) the *regional reference node* (known as the Thomastown 66kV node) for the Victoria *region*,

are not affected by the abolition of the *regional reference node* known as the Murray 330kV node for the Snowy *region*.

## 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 *NEMMCO* 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) *NEMMCO* 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), *NEMMCO* 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:
    - (i) 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 *NEMMCO* 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) *NEMMCO* 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 *NEMMCO* under clause 3.6.1(c).
- (f) *NEMMCO* 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 a single static *intra-regional loss factor* that applies for a *financial year* derived in accordance with the methodology determined by *NEMMCO* pursuant to clause 3.6.2(d) for each *transmission network connection point*; 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*.
- (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) *NEMMCO* 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*.
- (e) In preparing the methodology referred to in clause 3.6.2(d), *NEMMCO* 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* 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 NEMMCO 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) The *intra-regional loss factor* for each *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 the *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) NEMMCO 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 NEMMCO under clause 3.6.2(d).
- (f1) By 1 April in each year, NEMMCO must *publish* the *intra-regional loss factors* revised under clause 3.6.2(f) and to apply for the next *financial year*.
- (g) NEMMCO 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, NEMMCO 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), NEMMCO must:
- (1) determine an *intra-regional loss factor* in the *financial year* in which the *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 NEMMCO did not determine an *intra-regional loss factor* for the *transmission network connection point* pursuant to clause

- 3.6.2(f1) in the *financial year* preceding that in which the *connection point* is established; or
- (2) revise an *intra-regional loss factor* in the *financial year* in which the *intra-regional loss factor* is to apply for a *transmission network connection point* which is modified in that *financial year* in accordance with the procedure for modifying *connection* set out in rule 5.3, provided that, in *NEMMCO*'s reasonable opinion, the modification to that *connection point* results in a material change in the capacity of the *connection point*.
- (j) *NEMMCO* must, where required to determine the *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 *NEMMCO* pursuant to clause 3.6.2(d).
- (k) For the purposes of clause 3.6.2(j), the forecast *load* and *generation* data used to calculate the *intra-regional loss factor* for the *transmission network connection point* must be determined using the forecast *load* and *generation* data determined by *NEMMCO* under clause 3.6.2A for other *transmission network connection points* in the same *region* for that *financial year* adjusted to take into account the effect of the established or modified *connection point*. Notwithstanding this clause 3.6.2(k), *Registered Participants* must comply with their obligations with respect to the provision of information to *NEMMCO*, for the purpose of determining new or revised *intra-regional loss factors* for *connection points* that are established or modified during the *financial year* in which the *intra-regional loss factors* are to apply, specified by the methodology developed and published by *NEMMCO* under clause 3.6.2A.
- (l) In the case of a *connection point* that is established in the *financial year* in which the *intra-regional loss factor* is to apply:
- (1) the *intra-regional loss factor* determined by *NEMMCO* in accordance with clause 3.6.2(i) will apply from the time the *intra-regional loss factor* is determined and published by *NEMMCO*; and
- (2) *NEMMCO* must use reasonable endeavours to determine and publish the *intra-regional loss factor* at least 45 *business days* prior to the commencement of operation of the established *connection point*, where the relevant *Registered Participants* comply with any applicable requirements and deadlines for the provision of information to *NEMMCO* specified by the methodology published by *NEMMCO* under clause 3.6.2A.
- (m) In the case of a *connection point* that is modified in the *financial year* in which the *intra-regional loss factor* is to apply:
- (1) the *intra-regional loss factor* determined by *NEMMCO* in accordance with clause 3.6.2(i) will apply from the date when the modification to the *connection point* takes effect; and
- (2) *NEMMCO* must use reasonable endeavours to publish the *intra-regional loss factor* at least 45 *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 *NEMMCO* specified by the methodology *published* by *NEMMCO* under clause 3.6.2A.

- (n) For the avoidance of doubt, where *NEMMCO* 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) *NEMMCO* 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 *NEMMCO* for this purpose, under clause 3.6.2A(b).
- (b) *NEMMCO* 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 *NEMMCO* under clause 3.6.2A(b) must specify information reasonably required by *NEMMCO* 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), *NEMMCO* 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 NEMMCO 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* 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);
- (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* 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.

- (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
  - (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 *NEMMCO* 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*.
- (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:
    - A. 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
    - B. 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 NEMMCO for *publication* by 1 April. Before providing the *distribution loss factors* to NEMMCO 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* NEMMCO 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 NEMMCO 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 clause 3.6.5(a)(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*);
  - (4) subject to clauses 11.1.1 and 11.1.2, if the *settlements residue* arising in respect of a *trading interval*, after taking into account any 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:
    - (i) NEMMCO must recover the amount from the appropriate *Transmission Network Service Provider* within the *region* (the “importing region”) to which electricity is transferred during the relevant *trading interval* from another *region* (the “exporting region”) through *regulated interconnectors*, at a payment interval, and by a method, determined by NEMMCO, and which may include a determination that an appropriate *Transmission Network Service Provider* make payment at a date prior to the settlement date determined in respect of other *Transmission Network Service Providers*; and
    - (ii) the appropriate *Transmission Network Service Provider* must make the payment at the time and payment interval, and by the method, determined by NEMMCO;
  - (4A) subject to clauses 11.1.1 and 11.1.2, if interest costs are incurred by NEMMCO in relation to any unrecovered negative *settlements residue* amount referred to in clause 3.6.5(a)(4), then, in respect of the *billing period* in which the negative *settlements residue* arises:
    - (i) NEMMCO must recover the interest costs from the appropriate *Transmission Network Service Provider* within the *region* (the “importing region”) to which electricity is transferred during the relevant *trading interval* from another *region* (the “exporting region”) through *regulated interconnectors*, at a payment interval, and by a method, determined by NEMMCO, and which may include a determination that an appropriate *Transmission Network Service Provider* make payment at a date prior to the settlement

date determined in respect of other *Transmission Network Service Providers*; and

(ii) the appropriate *Transmission Network Service Provider* must make the payment at the time and payment interval, and by the method, determined by *NEMMCO*;

(4B) for the purposes of sub-paragraphs (4) and (4A), the *AER* must, in accordance with the *Rules consultation procedures*, make, publish, and where necessary, amend, a determination identifying the appropriate *Transmission Network Service Provider* (which must not include a *Market Network Service Provider*) responsible for payments in respect of *negative settlements residues* in relation to each *directional interconnector*, and must notify *NEMMCO* of the making or amendment of any such determination;

~~(4) subject to clause 3.6.5(c), if the *settlements residue* arising in respect of a *trading interval*, after taking into account any adjustment in accordance with clauses 5.7.7(aa)(3) or (ab), is a negative amount, then the amount may be recovered:~~

~~(i) to the extent to which the *settlements residue* would have been distributed in accordance with clause 3.6.5(a)(2), from *eligible persons* participating in the *auctions* conducted under rule 3.18 either from positive *settlements residue* amounts arising in the same *billing period* or otherwise as part of future *auction expense fees*; and~~

~~(ii) from the *Network Service Provider* to which the *settlements residue* would have been distributed had it been a positive amount; and~~

~~(4A) subject to clause 3.6.5(c), if the *settlements residue* arising in respect of a *trading interval*, after taking into account any adjustment in accordance with clause 5.7.7(aa)(3) or (ab), is a negative amount, then:~~

~~(i) the whole or any part of the amount may be recovered from positive *settlements residue* amounts arising in the *billing period* in which the negative *settlements residue* arose; and~~

~~(ii) if the whole or a part of the amount is not recoverable under clause 3.6.5(a)(4A)(i), the unrecovered amount may be recovered from the proceeds of the first *auction* after that *billing period*; and~~

~~(iii) if the whole or a part of the amount is recoverable under neither clause 3.6.5(a)(4A)(i) nor clause 3.6.5(a)(4A)(ii), the unrecovered amount may be recovered from the proceeds of successive *auctions* until the negative amount is recovered.~~

~~(4B) subject to clause 3.6.5(a)(4A), interest costs incurred by *NEMMCO* in relation to any unrecovered negative *settlements residue* amounts referred to in clause 3.6.5(a)(4A) may be recovered;~~

- ~~(i) from proceeds of the first auction after the billing period in which the interest costs arose; and~~
  - ~~(ii) if the whole or a part of the interest costs are not recoverable under clause 3.6.5(a)(4B)(i), unrecovered interest costs may be recovered from the proceeds of successive auctions until all the interests costs are recovered.~~
- (5) for the purposes of the distribution or recovery of *settlements residue* that is attributable to *regulated interconnectors*:
  - (i) all of the *settlements residue* relating to electricity that is transferred from one *region* (the “exporting region”) to another *region* (the “importing region”) must be allocated to *Network Service Providers* in respect of a *network* located in the importing region (or part of a *network* located in the importing region);
  - (ii) the importing region must, in respect of the period from *market commencement* until the expiry date referred to in subparagraph (iv), pay a charge to the exporting region reflecting the extent of the use of a *network* located in the exporting region (or part of a *network* located in the exporting region) to transfer the electricity from the exporting region to the importing region;
  - (iii) the amount of the charge described in subparagraph (ii) must not exceed the amount of the *settlements residue* referred to in subparagraph (i), and must be agreed between the *participating jurisdictions* in which the importing region and the exporting region are located; and
  - (iv) the expiry date referred to in subparagraph (ii), means 1 July 2009 or the date of commencement of rules which make alternative provision in the *Rules* for inter-regional *settlements*, whichever is the earlier date; and
- (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) ~~Subject to clauses 11.1.1 and 11.1.2:~~
  - ~~(i) clause 3.6.5(a)(4) does not have effect during the period commencing on 1 July 2006 and ending at the last moment of 30 June 2010 but comes into effect again at the end of that period; and~~

~~(ii) — clauses 3.6.5(a)(4A) and (4B) expire at the end of that period.~~

### 3.7 Projected Assessment of System Adequacy

#### 3.7.1 Administration of PASA

- (a) *NEMMCO* 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* prospects so that *Scheduled Generators* and *Market 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 *NEMMCO* 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
    - (v) significant changes to *load* forecasts previously notified to *NEMMCO*,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 subparagraphs (1) and (2), *publish* information that will:
    - (i) assist *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* to plan any scheduled work on *plant*; and
    - (ii) inform the *market* of possible *power system security* problems.
- (d) *NEMMCO* must use its reasonable endeavours to ensure that it provides to *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* sufficient information to allow *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* to undertake maintenance and *outage* planning without violating *power system security* and to allow the *market* to operate effectively with a minimal amount of intervention by *NEMMCO*.



### 3.7.2 Medium term PASA

- (a) The *medium term PASA* covers the 24 month period commencing from the *day 8 days* after the *day* of publication with a daily resolution, and must be reviewed and issued every week by *NEMMCO* in accordance with the *timetable*.
- (b) *NEMMCO* may *publish* additional updated versions of the *medium term PASA* in the event of *changes* which, in the judgment of *NEMMCO*, are materially significant and should be communicated to *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants*.
- (c) The following *PASA* inputs are to be prepared by *NEMMCO*:
  - (1) forecast *load* which is:
    - (i) to indicate for each *region* the most probable *peak load*, time of the peak, and daily *energy* on the basis of past trends, day type and special events including all anticipated *scheduled load* and other *load* except 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) reserve requirements of each *region* determined in accordance with the *medium term capacity reserve standards* set out in the *power system security and reliability standards*;
  - (3) forecast *network constraints* known to *NEMMCO* at the time;
  - ~~(3) forecast *inter regional network constraints* and *intra regional network constraints* known to *NEMMCO* at the time; and~~
  - (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*; and
  - (2) *weekly energy constraints* applying to each *scheduled generating unit* or *scheduled load*.
- (e) *Network Service Providers* must provide to *NEMMCO* an outline of planned *network outages* in accordance with the *timetable* and provide to *NEMMCO* any other information on planned *network outages* that is reasonably requested by *NEMMCO* to assist *NEMMCO* to meet its obligations under paragraph (f)(6).

- (f) *NEMMCO* must prepare and *publish* the following information in respect of each *day* covered by the *medium term PASA* in accordance with clause 3.13.4:
- (1) forecasts of the most probable peak *power system load* plus required *reserve*, adjusted to make allowance for *scheduled load*, for each *region* and for the total *power system*;
  - (2) the aggregated MW allowance (if any) made by *NEMMCO* for *generation* from *non-scheduled generating systems* in each forecast of the most probable peak *power system load* referred to subparagraph (1);
  - (3) in respect of each forecast of the most probable peak *power system 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 *energy* consumption for each *region* and for the total *power system*;
  - (5) aggregate *generating unit PASA availability* for each *region*, calculated by adding the following categories:
    - (i) the capacity of *scheduled generating units* that are able to operate at the full offered *PASA availability* on a continuous basis to meet forecast *power system load*;
    - (ii) an allocation of *generation* that cannot be *generated* continuously at the full offered *PASA availability* of the *scheduled generating units* for the period covered due to specified weekly *energy constraints*; and
    - (iii) the forecast *generation* of *semi-scheduled generating units* as provided by the *unconstrained intermittent generation forecasts*; and
  - (6) identification and quantification of:
    - (i) any projected *violations* of *power system security*;
    - (ii) any *days* on which *low reserve* or *lack of reserve* conditions are forecast to apply;
    - (iii) where a projected *supply deficit* in one *region* can be supplemented by a surplus in another *region* (dependent on forecast *interconnector* transfer capabilities);
    - (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) *NEMMCO* must document the procedure it uses for preparation of the *medium term PASA* and make it available to all *Scheduled Generators, Semi-Scheduled Generators* and *Market Participants* on a cost recovery basis.

### 3.7.3 Short term PASA

- (a) The *short term PASA* must be issued at least daily by *NEMMCO* 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 half hourly resolution.
- (c) *NEMMCO* may *publish* additional updated versions of the *short term PASA* in the event of *changes* which, in the judgement of *NEMMCO*, are materially significant and should be communicated to *Scheduled Generators, Semi-Scheduled Generators* and *Market Participants*.
- (d) The following *short term PASA inputs* are to be prepared by *NEMMCO*:
  - (1) forecast *load* which is to include:
    - (i) the most probable half hourly *profile* 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 offers* for *scheduled load*;
  - (2) *reserve* requirements for each *region* determined in accordance with the *short term capacity reserve standards*;
  - (3) anticipated *network constraints* known to *NEMMCO* at the time; and
  - ~~(3) anticipated *inter-regional network constraints* and *intra-regional network constraints* known to *NEMMCO* 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) availability 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*;

- (3) *scheduled generating unit synchronisation and de-synchronisation times for slow start generating units; and*
- (4) *projected daily energy availability for energy constrained scheduled generating units and energy constrained scheduled loads.*
- (f) *If NEMMCO considers it reasonably necessary for adequate power system operation and the maintenance of power system security, Registered Participants who may otherwise be exempted from providing inputs for the PASA process must do so to the extent specified by NEMMCO.*
- (g) *Network Service Providers must provide to NEMMCO an outline of planned network outages in accordance with the timetable and provide to NEMMCO any other information on planned network outages that is reasonably requested by NEMMCO to assist NEMMCO to meet its obligations under clause 3.7.3(h)(5).*
- (h) *NEMMCO must prepare and publish the following information as short term PASA outputs for each trading interval in the period covered in accordance with clause 3.13.4(c):*
  - (1) *forecasts of the most probable power system load plus required scheduled reserve adjusted to make allowance for scheduled load, for each region and for the total power system;*
  - (2) *forecasts of power system load for each region with 10% and 90% probability of exceedence;*
  - (3) *forecasts of the most probable energy consumption for each region and for the total power system;*
  - (4) *aggregate generating unit availability for each region calculated by adding the following categories:*
    - (i) *the capacity of scheduled generating units that are able to operate at the full offered availability on a continuous basis to meet forecast power system load;*
    - (ii) *an allocation of generation that cannot be generated continuously at the full offered availability of the scheduled generating units for the period covered due to specified daily energy constraints; and*
    - (iii) *the forecast generation of semi-scheduled generating units as provided by the unconstrained intermittent generation forecasts;*
- (4A) *aggregate generating unit PASA availability for each region;*
- (4B) *the aggregated MW allowance (if any) made by NEMMCO for generation from non-scheduled generating systems in each forecast:*
  - (i) *of the most probable peak power system load referred to in clause 3.7.3(h)(1); and*

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

(4C) in respect of each forecast:

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

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

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 *trading intervals* for which *low reserve* or *lack of reserve* conditions are forecast to apply;

(iii) where a projected *supply* deficit in one *region* can be supplemented by a surplus in another *region* (dependent on forecast *interconnector* transfer capabilities);

(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) In the event that in performing the *short-term PASA NEMMCO* identifies any projected *low reserve* or *lack of reserve* conditions in respect of a *participating jurisdiction*, then *NEMMCO* must use its reasonable endeavours to advise the *Jurisdictional Co-ordinator* for that *participating jurisdiction* of any potential requirements during such conditions to shed *sensitive loads*.

(j) *NEMMCO* must document the procedure it uses for preparation of the *short term PASA* and make it available to all *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* on a cost recovery basis.

### **3.7A Congestion information resource**

(a) The objective of the *congestion information resource* is to provide information in a cost effective manner to *Market 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*, NEMMCO must develop and *publish*, in accordance with this rule 3.7A, an information resource comprising:

- (1) information on *planned network events*;
- (2) historical data on *mis-pricing* at *transmission network nodes* in the *national electricity market*; and
- (3) any other information that NEMMCO, 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.X.2.

(d) NEMMCO 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 NEMMCO forms the view that such an amendment will improve the implementation of the *congestion information resource objective*.

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

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

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

(h) NEMMCO must *publish* the first *congestion information resource* by [DATE B] and there must be a *congestion information resource* available at all times after that date.

**Note:** DATE B is intended to be 1 year after this Rule commences operation.

(i) For the purpose of *publishing* the first *congestion information resource* under paragraph (b), NEMMCO may, subject to paragraph (d), *publish* the interim

congestion information resource referred to in clause 11.X.2, as the first congestion information resource, in whole or in part.

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

### **Congestion information resource guidelines**

- (k) NEMMCO must develop and publish guidelines ('the congestion information resource guidelines') for and with respect 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 the information to be provided by Transmission Network Service Providers in accordance with paragraphs (n) and (o);
- (3) the processes to be implemented by NEMMCO 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 NEMMCO for providing Market Participants with information under paragraph (g).

- (l) NEMMCO must develop and publish the first congestion information resource guidelines in accordance with the Rules consultation procedures by [DATE A] and there must be a set of congestion information resource guidelines available and up to date at all times after this date.

**Note:** DATE A is intended to be 6 months after this Rule commences operation.

- (m) NEMMCO 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 NEMMCO 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.

- (o) Where 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 NEMMCO with the revised information as soon as practicable.

- (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) represents 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*.

### **~~3.7A — Market Information on planned network outages~~**

- ~~(a) — The objective of this rule 3.7A is to provide *Market Participants* with the information on planned *network outages* required so that *Market Participants* are properly informed to enable them to make projections of *market* outcomes, including projections of *settlement residue auction* outcomes, and decisions with respect to *hedge contracts* and other financial risk management tools. Information on planned *network outages* made available to *Market Participants* by *NEMMCO* and *Transmission Network Service Providers* under this rule 3.7A, however, represents a *Transmission Network Service Provider's* current intentions and best estimates regarding planned *network outages* at the time the information is made available. Further, a *Transmission Network Service Provider* may not be bound to comply with an advised *outage* program. A planned *outage* program may be subject to change due to unforeseen circumstances outside the control of the *Transmission Network Service Provider*. Accordingly, information on planned *network outages* may be subject to change.~~
- ~~(b) — In addition to the obligations imposed on *Transmission Network Service Providers* and *NEMMCO* by rule 3.7 to provide information on planned *network outages* for the purpose of *PASA*, *Transmission Network Service Providers* must provide to *NEMMCO* and publish, and *NEMMCO* must determine and publish, the information required under this rule 3.7A with respect to planned *network outages*.~~
- ~~(c) — Each month, in accordance with the *timetable* for the provision of information to *medium term PASA*, each *Transmission Network Service Provider* must provide to *NEMMCO* and publish:~~
- ~~(1) — details of the forecast timing and the factors affecting the timing of planned *network outages* and the likelihood that the planned timing will vary;~~
  - ~~(2) — details of the reason for the planned *network outage*, including the nature and extent of works required, if any; and~~
  - ~~(3) — any other information with respect to planned *network outages* that is reasonably requested by *NEMMCO* with a view to achieving the objective set out in rule 3.7A(a);~~



~~for those *network outages* planned for the following thirteen months that, in the reasonable opinion of the *Transmission Network Service Provider*, will have or are likely to have a material effect on transfer capabilities:~~

~~(d) Each month, in accordance with the *timetable* for the provision of information to *medium term PASA*, *NEMMCO* must determine and publish:~~

~~(1) an assessment of the projected impact on *intra-regional power transfer capabilities*, the accuracy of which must be appropriate to meet the objective in rule 3.7A(a) in a cost effective manner;~~

~~(2) an assessment of the projected impact on *inter-regional power transfer capabilities*, the accuracy of which must be appropriate to meet the objective in rule 3.7A(a) in a cost effective manner; and~~

~~(3) any other information with respect to planned *network outages* that, in *NEMMCO's* opinion, would assist in achieving the objective set out in rule 3.7A(a);~~

~~for those planned *network outages* in respect of which a *Transmission Network Service Provider* has provided information to *NEMMCO* under rule 3.7A(e).~~

### 3.7B Unconstrained intermittent generation forecast

(a) *NEMMCO* 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 *NEMMCO*, 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 *NEMMCO* 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.

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

- (1) the total registered capacity provided by the *Semi-Scheduled Generator* as part of its *registered bid and offer 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, commencing on the day the *EAAP* is *published* under this rule 3.7C;
  - (2) be *published* every three months;
  - (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 *NEMMCO* 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 *NEMMCO* considers in, and for the purposes of, clause 5.6.5(c) in carrying out the *ANTS review*;
  - (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) *NEMMCO* must comply with the *EAAP principles* in preparing the *EAAP*.

#### **Administration of EAAP**

- (d) *NEMMCO* must *publish* the *EAAP* every three months in accordance with the *timetable* and the first *EAAP* must be published by 31 March 2010.
- (e) For the purposes of preparing the *EAAP*, a *Scheduled Generator* must provide *NEMMCO* 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 *NEMMCO* to study the scenarios defined in the *EAAP guidelines*.
- (f) In considering whether information referred to in subparagraph (e)(2) is reasonably required, *NEMMCO* 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 *NEMMCO*, 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 *NEMMCO* 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 every three months in accordance with the *timetable*.
- (i) Where 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 *NEMMCO* must be treated by *NEMMCO* as *confidential information*.

#### **EAAP guidelines**

- (k) *NEMMCO* must develop and *publish* guidelines (the '*EAAP guidelines*') that:
  - (1) define scenarios that *NEMMCO* must study in 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); and

- (8) define arrangements for managing the confidentiality of information submitted to *NEMMCO* under this rule 3.7C.
- (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 *NEMMCO* reasonably considers will have a material impact on the *EAAP*.
- (m) *NEMMCO* must comply with the *EAAP principles* in preparing the *EAAP guidelines*.
- (n) *NEMMCO* must comply with the *EAAP guidelines* in preparing the *EAAP*.
- (o) *NEMMCO* must develop and *publish* the *EAAP guidelines* in accordance with the *Rules consultation procedures*.
- (p) *NEMMCO* must develop and *publish* the first *EAAP guidelines* by 30 June 2009 and there must be a set of *EAAP guidelines* available at all times after that date.
- (q) *NEMMCO* 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) *NEMMCO* 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) The *Reliability Panel* must conduct a review of the operation of this rule 3.7C by no later than the end of the third year after the *publication* of the first *EAAP*.

## **3.8 Central Dispatch and Spot Market Operation**

### **3.8.1 Central Dispatch**

- (a) *NEMMCO* 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, that is 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-scheduled 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 and reliability standards;

(5) network constraints;

(6) intra-regional losses and inter-regional losses;

(7) constraints consistent with registered bid and 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 registered bid and offer data;

(11) ensuring that as far as reasonably practical, in relation to a NEMMCO intervention event:

(A) the number of Affected Participants; and

(B) the effect on interconnector flows,

is minimised; and

(12) the management of negative settlements residues, in accordance with clause 3.8.10 and any guidelines issued by NEMMCO under clause 3.8.10(c).

~~(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 and reliability standards;~~
- ~~(5) intra-regional network constraints and intra-regional losses;~~
- ~~(6) inter-regional network constraints and inter-regional losses;~~
- ~~(7) constraints consistent with registered bid and 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 registered bid and offer data; and~~
- ~~(11) ensuring that as far as reasonably practical, in relation to a NEMMCO intervention event:
  - ~~(A) the number of Affected Participants; and~~
  - ~~(B) the effect on interconnector flows;~~is minimised.~~

(c) NEMMCO 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 NEMMCO's obligations to maintain *power system security* and the pricing principles listed in clause 3.9.1; and
- (2) NEMMCO must report to *Registered Participants* any events requiring the relaxation of these *constraints*.

- (d) *NEMMCO* must develop and *publish a dispatch algorithm* to be used by *NEMMCO* for the purpose of *central dispatch* and pricing in accordance with rules 3.8 and 3.9.
- (e) *NEMMCO* 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) *NEMMCO* 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 *NEMMCO* determines the quantity of each *market ancillary service* which will be *enabled*, *NEMMCO* 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) *NEMMCO* 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.
- (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*.
- (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.
- (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*.

- (c) *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 *NEMMCO* 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 *NEMMCO* 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 *NEMMCO*.

### 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 *NEMMCO* to do so.
- (b) *NEMMCO* must approve applications for aggregation made under paragraph (a) if the following conditions are fulfilled:
  - (1) aggregated *generating units* or *loads* must be *connected* at a single site with the same *intra-regional loss factor* and be 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.
- (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*, *NEMMCO* 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.

- (e) *NEMMCO* 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.
- (f) *Scheduled Generators* and *Market Participants* that have been granted aggregated status must, if required by *NEMMCO*, declare individual *scheduled generating unit*, *scheduled network service* or *scheduled load* availability and operating status to *NEMMCO* in the *PASA* process under rule 3.7 to allow *power system security* to be effectively monitored.
- (g) If a *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant's* application for aggregation is denied by *NEMMCO*, *NEMMCO* must provide that applicant with reasons for that denial.
- (h) *NEMMCO* must maintain a database of aggregated *scheduled generating units*, *semi-scheduled generating units*, *scheduled network services* and *scheduled loads* and their components.
- (i) 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 *NEMMCO* 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(b);
    - (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 NEMMCO for each *generating unit*, *scheduled network service* and/or *scheduled load* that is:
- (1) at least:
    - (i) 3MW/minute in the case of a *scheduled network service* or *scheduled load*; or
    - (ii) the lower of:
      - (A) 3MW/minute or 3% of the registered full *load* (MW generated) in the case of a *scheduled generating unit*; or
      - (B) 3MW/minute or 3% of the registered capacity in the case of a *semi-scheduled generating unit*,provided in accordance with clause 3.13.3(b), expressed as MW/minute rounded down to the nearest whole number except where this would result in the nearest whole number being zero, in which case the up *ramp rate* and/or down *ramp rate* is deemed to be 1 MW/minute; and
  - (2) at most the relevant *maximum ramp rate* provided in accordance with clause 3.13.3(b).
- (c) A *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* to which this clause 3.8.3A applies may provide a *ramp rate* to NEMMCO 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 NEMMCO that is the maximum the relevant *generating unit*, *scheduled load* or *scheduled network service* can safely attain at that time.
- (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 NEMMCO 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 *NEMMCO* 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 *NEMMCO* 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).

### 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 *NEMMCO* of their available capacity as follows in accordance with the *timetable*:

- (a) *Scheduled Generators* and *Market Participants* must notify *NEMMCO* 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;
- (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*;
- (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*;
- (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*.

### 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 NEMMCO must be made using the *electronic communication system* unless otherwise approved by NEMMCO.

### 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 *VoLL* multiplied by the *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 *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 *NEMMCO* 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 *NEMMCO'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:

$$RP = DOP \div LF$$

where

RP is the price specified in the *dispatch offer* when referred to the appropriate *regional reference node* and must not be greater than *VoLL* 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 *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 *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.

### 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:

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

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 notified in accordance with schedule 3.1;

- (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:

$$P = \text{RP} \times \text{LF}$$



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 *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 *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 *VoLL*; and
- (j) the power delivery range specified in each *price band* in each *trading interval* must be specified in whole MW.

### 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:

$$RP = DOP \div LF$$

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 *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 *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 *NEMMCO*;
- (h) prices specified must be:
  - (1) more than the product of the *market floor price* multiplied by the *intra-regional loss factor* at the *scheduled load's transmission network connection point*; and
  - (2) less than the product of *VoLL* multiplied by the *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*.

### 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* of the *Market Participant* or, with *NEMMCO*'s agreement, at any other point in the *Market Participant*'s 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* of the *Market Participant* or, with *NEMMCO*'s agreement, at any other point in the *Market Participant*'s 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 *VoLL*;
- (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
- (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*.

### 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), *NEMMCO* 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 NEMMCO 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 NEMMCO in the *central dispatch process* is correct.
- (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), NEMMCO 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 *registered bid and offer data* provided by the relevant *Scheduled Generator, Semi-Scheduled Generator or Market Participant* then NEMMCO 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 NEMMCO 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) *NEMMCO*, 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 *NEMMCO* 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*.
- (e) *NEMMCO* 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 *NEMMCO power system security responsibilities* and any other standards set out in Chapter 4, *NEMMCO* 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), *NEMMCO* 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) *NEMMCO* must, in accordance with the *Rules consultation procedures*, develop and *publish* by [DATE A], and, where necessary, amend *network constraint* formulation guidelines, to address, amongst other things, the following matters:
  - (1) the circumstances in which *NEMMCO* will use *alternative network constraint formulations in dispatch*;
  - (2) the process by which *NEMMCO* 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 *NEMMCO* in determining *network constraint* equation terms and co-efficients; and
    - (ii) the means by which *NEMMCO* will obtain information from, and disseminate information to, *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants*;

- (3) the methodology to be used by NEMMCO 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 NEMMCO for applying, invoking and revoking network constraint equations in respect of different types of network constraints, including in respect of:
  - (i) the circumstances in which NEMMCO 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) NEMMCO's policy in respect of the management of negative settlements residues, 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 NEMMCO to manage negative settlements residues.

Note: DATE A is intended to be 9 months after this Rule commences operation.

- (d) NEMMCO must at all times comply with the network constraint formulation guidelines issued in accordance with paragraph (c).
- (e) Where, in NEMMCO's reasonable opinion, a specific network constraint is such that use of a fully co-optimised network constraint formulation is not appropriate, NEMMCO may apply an alternative network constraint formulation for the expected duration of that network constraint, if NEMMCO:
  - (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 demand, consistent with 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, in accordance with clause 3.8.1(a) and (b).
- (f) NEMMCO 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) Within 3 years from the date the National Electricity Amendment (Fully Co-optimised and Alternative Constraint Formulations) Rule 2009 commences operation, the AEMC must commence a review, under section 45 of the

*National Electricity Law, in respect of the efficiency with which NEMMCO is managing circumstances in which the settlements residue arising in respect of a trading interval is a negative amount.*

- ~~(b) NEMMCO must represent intra-regional network constraints and inter-regional network constraints as inputs to the dispatch process in a form that can be reviewed after the trading interval in which they occurred.~~
- ~~(c) The process used by NEMMCO to derive the network constraints must be clearly documented and made available to Scheduled Generators, Semi-Scheduled Generators and Market Participants.~~

### **3.8.11 Ancillary services constraints**

- (a) NEMMCO must determine the quantity and nature of *ancillary services* which:
- (1) have been provided or procured in accordance with the *NEMMCO 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* NEMMCO 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**

NEMMCO 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**

NEMMCO 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*, NEMMCO 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 NEMMCO 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 *VoLL*;

(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 NEMMCO 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 *NEMMCO*.
- (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 *NEMMCO dispatch* that *generating unit* subject to the *dispatch* procedures set out in this rule 3.8.



- (e) A *Scheduled Generator* must advise *NEMMCO* of its intention to *self-commit* and *synchronise* a *scheduled generating unit* with a *nameplate rating* of 30MW or more.
- (f) Unless otherwise agreed with *NEMMCO*, 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 *NEMMCO* in accordance with Chapter 4.
- (h) A *Scheduled Generator* or *Market Participant* must notify *NEMMCO* of any changes to *self-commitment* decisions without delay.
- (i) *NEMMCO* 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 *NEMMCO* of their planned *self-decommitment* decisions in relation to *slow start generating units* at least 2 *days* in advance of *dispatch*.
- (c) A *Scheduled Generator* must advise *NEMMCO* of its intention to *self-decommit* and *de-synchronise* a *generating unit* with a *nameplate rating* of 30 MW or more.
- (d) Unless otherwise agreed with *NEMMCO*, 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 *NEMMCO* as soon as practicable of any changes in their *self-decommitment* decisions.
- (f) *NEMMCO* 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 *NEMMCO* 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.*

- (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 *NEMMCO* 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*.
- (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 *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* of the *inflexibility*; and

- (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*, *NEMMCO* 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 *NEMMCO*, as part of the *registered bid and offer data* in respect of those *scheduled loads* or *generating units* or *semi-scheduled generating units*, with a *dispatch inflexibility profile*.
- (e) 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 *NEMMCO* to increase its loading 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 *NEMMCO* to reduce loading 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) NEMMCO 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*, NEMMCO 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) NEMMCO 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) NEMMCO'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* NEMMCO 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 NEMMCO 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 NEMMCO 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* its 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.

- (h) The *pre-dispatch schedule* must be re-calculated and the results re-*published* by NEMMCO regularly in accordance with the *timetable*, or more often if a change in circumstances is deemed by NEMMCO to be likely to have a significant effect on the operation of the *market*.
- (i) NEMMCO 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 NEMMCO 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* 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*, NEMMCO 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 NEMMCO using the *dispatch algorithm*.
- (a1) A *dispatch interval* is to be five minutes in duration.
- (b) The *dispatch algorithm* is to be run by NEMMCO 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) *NEMMCO* 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 *NEMMCO*.
- (i) *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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) *NEMMCO* 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 *NEMMCO* 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*, *NEMMCO* must notify the *Scheduled Generator* or *Semi-Scheduled Generator* operating the relevant *generating unit* electronically on a confidential basis.

### 3.8.22 Rebidding

- (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 paragraph (c) and 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 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*.
- (c) A *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* must provide:
  - (1) all *rebids* to *NEMMCO* electronically unless otherwise approved by *NEMMCO*;
  - (2) to *NEMMCO*, 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; and
  - (3) to the *AER*, upon written request, in accordance with guidelines published by the *AER* from time to time under this clause 3.8.22 and in accordance with the *Rules consultation procedures*, such additional information to substantiate and verify the reason for a *rebid* as the *AER* may require from time to time.
- (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 developed by the *AER* under paragraph (c)(3) must include:
  - (1) the amount of detail to be included in the information provided to *NEMMCO* 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) *NEMMCO* 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 Variation of offer, bid or rebid**

- (a) A *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* must make a *dispatch offer*, *dispatch bid* or *rebid* in relation to *available capacity* and *daily energy constraints* in good faith.
- (b) In paragraph (a) a *dispatch offer*, *dispatch bid* or *rebid* is taken to be made in good faith if, at the time of making such an offer, bid or *rebid*, a *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* has a genuine intention to honour that offer, bid or *rebid* if the material conditions and circumstances upon which the offer, bid or *rebid* were based remain unchanged until the relevant *dispatch interval*.
- (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 intention of the relevant *Generator* or *Market Participant* is ascertainable only by inference from:
  - (1) the conduct of the relevant *Generator* or *Market Participant*;
  - (2) the conduct of any other person; or
  - (3) the relevant circumstances.

### **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 *NEMMCO'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 *NEMMCO'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) *NEMMCO* 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 *NEMMCO's* opinion modification of *plant* parameters is necessary or desirable, *NEMMCO* must request the *Scheduled Generator*, *Semi-Scheduled Generator*, *Scheduled Network Service Provider* or *Market Customer* to submit modified *plant* parameters to satisfy *NEMMCO* 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 *NEMMCO* is not satisfied that the *generating unit* will respond to future *dispatch instructions* as required, *NEMMCO* 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 *NEMMCO*;
  - (4) should a *Scheduled Network Service Provider* fail to meet the requests set out in subparagraphs (1) and (2) or if *NEMMCO* is not satisfied that the *scheduled network service* will respond to future *dispatch instructions* as required, *NEMMCO* must direct the *scheduled network service* to follow, as far as is practicable, a specified transfer profile to be determined at its discretion by *NEMMCO*; 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 *NEMMCO* is not satisfied that the *scheduled load* will respond to future *dispatch instructions* as required, *NEMMCO* 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 *NEMMCO* 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, *NEMMCO* 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 *NEMMCO* 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 *NEMMCO*'s reasonable opinion), then:
  - (1) the *ancillary service generating unit* or *ancillary service load* is to be declared and identified as non-conforming;
  - (2) *NEMMCO* 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) *NEMMCO* 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 *NEMMCO*.
- (h) *NEMMCO* must lift the fixed constraint in respect of an *ancillary service generating unit* or *ancillary service load* when *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* has failed to follow the *central dispatch* process set out in this rule 3.8; or
  - (2) *NEMMCO* declares that it failed to follow the *central dispatch* process set out in this rule 3.8; or

- (3) *NEMMCO* determines under clause 3.9.2B(d) that a *dispatch interval* contained a manifestly incorrect input.
- (b) *Spot prices* and *market 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*;
  - (3B) *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 *NEMMCO* 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 *intra-regional loss factor* applicable to that *connection point*.

### 3.9.2 Determination of spot prices

- (a) **[Deleted]**
- (b) **[Deleted]**
- (c) Each time the *dispatch algorithm* is run by *NEMMCO*, 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 *NEMMCO* 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 NEMMCO reasonably determines that the *central dispatch* process may determine that all *load* in a *region* could not otherwise be supplied and NEMMCO issues instructions that are current for that *dispatch interval* to *Network Service Providers* or *Market Participants* to shed *load*, then NEMMCO must set the *dispatch price* at that *region's regional reference node* to equal *VoLL*;
  - (2) NEMMCO 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) NEMMCO must set the *dispatch price* in accordance with clause 3.9.3; and
  - (3) **[Deleted]**
  - (4) an *administered price period* in accordance with rule 3.14 applies, then NEMMCO must limit the *dispatch price* in accordance with clause 3.14.2(d1).
- (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*, provided that if NEMMCO has made a declaration that the *market* is suspended under clause 3.14.3, then the *spot price* in any *trading interval* during the period during which the *spot market* is suspended must be determined in accordance with clause 3.14.5.
- (i) **[Deleted]**
- (j) **[Deleted]**
- (k) If a test is being conducted on a *generating unit* or *scheduled load* in accordance with clause 3.11.7 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 NEMMCO, 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 NEMMCO 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 NEMMCO where a local *ancillary services constraint* has been applied, NEMMCO 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 *VoLL*, then the *ancillary service price* is reset to *VoLL*.
- (c1) If a marginal price calculated pursuant to clause 3.9.2A(b) is greater than *VoLL*, then that marginal price is reset to *VoLL*.
- (d) If a test is being conducted on a *generating unit* or *scheduled load* in accordance with clause 3.11.7 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 *market ancillary service prices*.

### 3.9.2B Pricing where NEMMCO 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 *NEMMCO*, 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) *NEMMCO* 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) *NEMMCO* may also determine that a *dispatch interval* is subject to review if *NEMMCO* 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) *NEMMCO* must determine whether a *dispatch interval* subject to review contained a manifestly incorrect input to the *dispatch algorithm* (“an affected *dispatch interval*”).
- (e) Where *NEMMCO* determines an affected *dispatch interval*, *NEMMCO* must:
  - (1) replace all *dispatch prices* and *market ancillary services* 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) *NEMMCO* 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), *NEMMCO* 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) *NEMMCO* 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, *NEMMCO* must review the effectiveness of the automated procedures referred to in clause 3.9.2B(h).

- (l) *NEMMCO* 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 NEMMCO

- (a) In respect of a *dispatch interval* where a *NEMMCO intervention event* occurs *NEMMCO* must declare that *dispatch interval* to be an *intervention price dispatch interval*.
- (b) Subject to paragraphs (c) and (d), *NEMMCO* 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 *NEMMCO*, 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 *NEMMCO intervention event* not occurred.
- (c) *NEMMCO* 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 *NEMMCO 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 *NEMMCO intervention event* was issued,provided that *NEMMCO* 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 *NEMMCO intervention event*.
- (d) *NEMMCO* 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 *NEMMCO's* reasonable opinion have avoided the need for any *direction* which constitutes the *NEMMCO intervention event* to be issued.
- (e) Subject to paragraph (g), *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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) *NEMMCO* may make minor and administrative amendments to the methodology developed under paragraph (e) without complying with the *Rules consultation procedures*.

### 3.9.4 VoLL

- (a) *VoLL* is a price cap which is to be applied to *dispatch prices*.
- (b) The value of *VoLL* is \$10,000/MWh.
- (c) By 30 April each year the *Reliability Panel* must conduct a review in accordance with the *Rules consultation procedures* and publish a report on the value of *VoLL* that it recommends should apply from 1 July in the year commencing 2 years after the year in which the review is conducted. In conducting a review in accordance with this clause 3.9.4(c) the *Reliability Panel* must have regard, in addition to any other *Rules* obligations, to the potential impact of any proposed increase in *VoLL* on:
  - (1) *spot prices*;
  - (2) investment in the national electricity market; and
  - (3) the reliability of the *power system*.
- (c1) The value of *VoLL* recommended by the *Reliability Panel* must be a level which the *Reliability Panel* considers will:
  - (1) allow the standard for reliability established by the *Reliability Panel* as part of the *power system security and reliability standards* to be satisfied without use of *NEMMCO's* powers to intervene under clauses 3.20.7(a) and 4.8.9(a);
  - (2) in conjunction with other provisions of the *Rules*, not create risks which threaten the overall integrity of the *market*; and
  - (3) take into account any other matters the *Reliability Panel* considers relevant.
- (c2) The *Reliability Panel's* report must set out the conclusions of its review and the recommendation in relation to the level of *VoLL* along with supporting information including:
  - (1) details of all relevant *market* conditions and circumstances on which the recommendation is based; and

- (2) an assessment of whether the level of *VoLL* together with the operation of the *cumulative price threshold* has achieved the objectives set out in clauses 3.9.4(c1)(1) and (2).
- (d) As part of the review conducted pursuant to clause 3.9.4(c), the *Reliability Panel* may review the value of *VoLL* for the year commencing on 1 July in the year following the year in which the current review is conducted. The *Reliability Panel* may only recommend a change to the level of *VoLL* for the year commencing on 1 July in the year following the year in which the review is being conducted where:
  - (1) in the *Reliability Panel's* opinion, it is highly probable that the relevant *market* conditions and circumstances on which the recommendation for that year were based as stated in the report from the Panel under clause 3.9.4(c) will not eventuate; and
  - (2) the *Reliability Panel* has given due consideration to the impact of the change to the value of *VoLL* on *Market Participants* and in the event of a decrease in the level of *VoLL*, any alternative arrangements considered necessary to ensure that the reliability standard set out in the *power system security and reliability standards* is maintained.

### 3.9.5 Application of VoLL

- (a) *Dispatch prices* at *regional reference nodes* must not exceed *VoLL*.
- (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 *VoLL* 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 *VoLL*.
- (c) If the *dispatch price* at any *regional reference node* is set to *VoLL* 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 product of *VoLL* multiplied by the average *loss factor* for that *dispatch interval* between that *regional reference node* and the *regional reference node* at which *dispatch prices* have been set to *VoLL* determined in accordance with clause 3.9.5(d).
- (d) *NEMMCO* 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) By 30 April each year the *Reliability Panel* must, as part of its review of *VoLL* under clause 3.9.4(c), conduct a review in accordance with the *Rules consultation procedures* and publish a report on the value of the *market floor*

*price* that it recommends should apply from 1 July in the year commencing after the year in which the review is conducted.

- (d) The value of the *market floor price* recommended by the *Reliability Panel* must be a level which the *Reliability Panel* considers will:
  - (1) allow the *market* to clear in most circumstances;
  - (2) not create substantial risks which threaten the overall stability and integrity of the *market*; and
  - (3) take into account any other matters the *Reliability Panel* considers relevant.
- (e) The *Reliability Panel's* report must set out the conclusions of its review and the recommendation in relation to the level of the *market floor price*, including details of all relevant *market* conditions and circumstances on which the recommendation is based.

### 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* towards that *regional reference node* must be equal to or greater than the product of *market floor price* multiplied by the average *loss factor* for that *dispatch interval* between that *regional reference node* and the *regional reference node* at which *dispatch prices* have been set to the *market floor price* in accordance with clause 3.9.6A.
- (d) *NEMMCO* 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 *NEMMCO* 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*.
- ~~(a) In the event that an *intra-regional 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 NEMMCO 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.*~~

- (b) A *Scheduled Generator* that is *constrained-on* in accordance with clause 3.9.7(a) is not entitled to receive from *NEMMCO* 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* which are acquired by *NEMMCO* 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* which are not acquired by *NEMMCO* as part of the *spot market*, but under agreements which are entered into following a call for offers in accordance with this rule 3.11. The prices for *non-market ancillary services* are determined in accordance with the relevant *ancillary services agreements*.

### **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) *NEMMCO* 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) *NEMMCO* may amend the *market ancillary service specification*, from time to time.
- (d) *NEMMCO* 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*.

### **3.11.3 Acquisition of non-market ancillary services**

- (a) *NEMMCO* must use reasonable endeavours to acquire *non-market ancillary services* in accordance with the remaining relevant provisions of rule 3.11.
- (b) The requirement for *NEMMCO* to acquire *non-market ancillary services* referred to in clause 3.11.3(a) must be met in the following ways:
- (1) by *NEMMCO* setting minimum standards which are to be dealt with in *Registered Participants' connection agreements* for the technical performance of the service; or
  - (2) by *NEMMCO* acquiring *ancillary services* in accordance with this rule 3.11 or giving a *direction* in accordance with clause 4.8.9.
- (c) *NEMMCO* must make and *publish* a set of *minimum technical ancillary service standards* that must be met by all *Registered Participants* who have entered into a *connection agreement*.
- (d) *NEMMCO* may amend the *minimum technical ancillary service standards* from time to time.
- (e) *NEMMCO* must comply with the *Rules consultation procedures* when making or amending the *minimum technical ancillary service standards*.
- (f) In setting or amending *minimum technical ancillary service standards*, *NEMMCO* must:
- (1) take into account the provisions of *connection agreements* existing at the time of setting or amending such standards;
  - (2) ensure that proposed *minimum technical ancillary service standards* do not impose more onerous material obligations on parties to existing *connection agreements*, as a whole, than are imposed by such existing *connection agreements*;

- (3) take into account and minimise the additional costs overall that may arise from proposed *minimum technical ancillary service standards* for parties to existing *connection agreements* generally; and
  - (4) take into account the obligations imposed on parties to *connection agreements* by Chapter 5 of the *Rules* and any applicable *derogation*.
- (g) The *minimum technical ancillary service standards* are not intended to, nor are to be read or construed as having the effect of:
- (1) altering any term of a *connection agreement*;
  - (2) altering the contractual rights or obligations of any of the parties under a *connection agreement* as between those parties; or
  - (3) relieving the parties under any such *connection agreement* of their contractual obligations under such agreement or obligations under Chapter 5 of the *Rules*.
- (h) An amendment to the *minimum technical ancillary service standards* must not take effect until at least 30 days after the *publication* of the report required under the *Rules consultation procedures*.
- (i) *NEMMCO* is not responsible for payment to a *Registered Participant* for services provided by that *Registered Participant* under a *connection agreement* or under clause 4.9.2(b).
- (j) A *Network Service Provider* must advise *NEMMCO* of all *ancillary services* or similar services to be provided by a *Registered Participant* under a *connection agreement* to which that *Network Service Provider* is a party.
- (k) *NEMMCO* may instruct a *Registered Participant* to provide a *non-market ancillary service* agreed to be provided under a *connection agreement* and any *Registered Participant* so instructed must use reasonable endeavours to comply with any such instruction.

#### **3.11.4 Procedure for determining quantities of network control ancillary services**

- (a) *NEMMCO* must develop and *publish* a detailed description of each *network control ancillary service*.
- (b) *NEMMCO* must develop and *publish* a procedure for determining the quantities of each kind of *network control ancillary service* required for *NEMMCO*:
  - (1) to achieve the *power system security and reliability standards*; and
  - (2) where practicable to enhance *network* transfer capability whilst still maintaining a *secure operating state* when, in *NEMMCO*'s reasonable opinion, the resultant expected increase in *network control ancillary service* costs will not exceed the resultant expected increase in benefits of trade from the *spot market*.

- (c) *NEMMCO* may amend the description developed under clause 3.11.4(a) and the procedure referred to in clause 3.11.4(b).
- (d) *NEMMCO* must comply with the *Rules consultation procedures* when making or amending descriptions or procedures under clause 3.11.4.

#### **3.11.4A Guidelines and objectives for acquisition of system restart ancillary services**

- (a) The objective for *system restart ancillary services* is to minimise the expected economic costs to the *market* in the long term and in the short term, of a *major supply disruption*, taking into account the cost of supplying *system restart ancillary services*, consistent with the *national electricity objective* (the **SRAS objective**).
- (b) *NEMMCO* must use reasonable endeavours to acquire *system restart ancillary services* in accordance with the relevant provisions of clause 3.11.4A.
- (c) Each of the guidelines and *SRAS* description which *NEMMCO* is required to develop and *publish* in accordance with clause 3.11.4A must be:
  - (1) consistent with the *SRAS* objective;
  - (2) designed to ensure the *system restart standard* is met; and
  - (3) designed to ensure that the need for *system restart ancillary services* in each *electrical sub-network* is met, to the extent that it is practicable and reasonable to do so, by *NEMMCO* entering into *ancillary services agreements* for the provision of *primary restart services*.(referred to collectively as the **SRAS procurement objectives**).
- (d) *NEMMCO* must develop and *publish* a detailed description of each type of *system restart ancillary service* in accordance with the guidelines determined by the *Reliability Panel* under clause 8.8.3(aa)(4), which description must identify:
  - (1) whether the *system restart ancillary service* is a *primary restart service* or a *secondary restart service*;
  - (2) the technical and availability requirements of each type of *system restart ancillary service*; and
  - (3) any other matter considered relevant by *NEMMCO*,(the **SRAS description**).
- (e) In order to demonstrate that there is a reasonable degree of certainty that a *facility* is capable of delivering the relevant *system restart ancillary service* if required to do so, *NEMMCO* must develop and *publish* guidelines for undertaking:

- (1) modelling and assessment of the technical capabilities of *system restart ancillary services* proposed to be submitted as part of a *SRAS* expression of interest or in response to a *NMAS* invitation to tender;
  - (2) physical testing of *system restart ancillary services* as required by the *NMAS* tender guidelines under clause 3.11.5(b)(2); and
  - (3) any other analysis which *NEMMCO* considers appropriate,  
(the **SRAS assessment guidelines**).
- (f) *NEMMCO* must develop and *publish* the procedure for determining the number, type and location of *system restart ancillary services* required to be procured for each *electrical sub-network* consistent with the *system restart standard* determined by the *Reliability Panel* (the **SRAS quantity guidelines**).
  - (g) *NEMMCO* may amend the *SRAS* assessment guidelines, the *SRAS* quantity guidelines and the *SRAS* description.
  - (h) *NEMMCO* must comply with the *Rules consultation procedures* when making or amending the *SRAS* assessment guidelines, the *SRAS* quantity guidelines and the *SRAS* description.

#### **3.11.4B 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) *NEMMCO* 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).
- (c) *NEMMCO* must comply with the *Rules consultation procedures* in determining the boundaries of the *electrical sub-networks*.

#### **3.11.5 Tender process for non-market ancillary services**

- (a) Except as provided in clause 4.8.9, if *NEMMCO* proposes to acquire a *non-market ancillary service*, *NEMMCO* must call for offers in accordance with the *NMAS* tender guidelines from persons who are in a position to provide the *non-market ancillary service* so as to have the required effect at a *connection* to a *transmission network*.
- (b) *NEMMCO* must determine and *publish* the *NMAS* tender guidelines. Separate *NMAS* tender guidelines may be prepared in respect of *network control ancillary services* and *system restart ancillary services*. The *NMAS* tender guidelines must contain the following:
  - (1) a requirement for *NEMMCO* to call for *NMAS* expressions of interest before issuing an *NMAS* invitation to tender in relation to any required *non-market ancillary services*;



- (2) a requirement that a person who is required to provide *SRAS* under an *ancillary services agreement* has the *facility* tested in accordance with:
    - (i) the *SRAS* assessment guidelines referred to in clause 3.11.4A(e); and
    - (ii) the timeframes for physical testing referred to in subparagraph (5);
  - (3) a requirement that a person who is to provide *network control ancillary services* under an *ancillary services agreement* has the *facility* tested in accordance with the *NMAS* tender guidelines;
  - (4) 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 *system restart ancillary services* proposed by a prospective tenderer;
  - (5) the timeframes over which *NEMMCO*'s assessment of *NMAS* tenders and physical testing of selected *non-market ancillary services* will occur;
  - (6) the period for which each *non-market ancillary service* may be contracted;
  - (7) a requirement for a tenderer to provide data, models and parameters of relevant *plant*, sufficient to facilitate a thorough assessment of the *network* impacts and *power station* impacts of the use of the relevant *non-market ancillary service*;
  - (8) the minimum terms and conditions of the *ancillary services agreement* that a successful tenderer would be expected to enter into with *NEMMCO*;
  - (9) the principles *NEMMCO* must adopt in assessing *NMAS* tenders; and
  - (10) any other matter considered appropriate by *NEMMCO*.
- (c) *NEMMCO* may amend the *NMAS* tender guidelines and must comply with the *Rules consultation procedures* when making or amending the *NMAS* tender guidelines.
  - (d) A *Registered Participant* is not under any obligation to submit an *NMAS* tender in response to an *NMAS* invitation to tender.
  - (e) *NEMMCO* is not under any obligation to accept the lowest priced *NMAS* tender or any *NMAS* tender in response to an *NMAS* invitation to tender.
  - (f) A *Network Service Provider* must:
    - (1) negotiate in good faith with a prospective tenderer in respect of issues the *NMAS* 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 *system restart ancillary service* required by the *NMAS* 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 *Registered Participant* 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 *Registered Participant* submits a *NMAS* tender in response to a *NMAS* invitation to tender and *NEMMCO* wishes to negotiate an aspect of that *NMAS* tender, *NEMMCO* and the *Registered Participant* must negotiate in good faith concerning that aspect.
- (h) Where the tender is for *network control ancillary services*, in assessing any offers submitted in response to a call for offers under this clause 3.11.5, *NEMMCO* must seek to acquire the quantity of the relevant kind of *network control ancillary services* determined in accordance with clause 3.11.4 by competitive tender and in accordance with this clause 3.11.5(h). A tender will be deemed to be a competitive tender for a particular *network control ancillary service* if the required quantity of that service determined in accordance with clause 3.11.4 can be supplied from the conforming offers received by *NEMMCO* with any one conforming offer discarded or all conforming offers from any one party discarded. If a tender process is not deemed to be a competitive tender for a particular *network control ancillary service*, then *NEMMCO* and those *Registered Participants* that submitted conforming and non-conforming tenders selected by *NEMMCO*, must negotiate in good faith to agree reasonable terms and conditions for the supply of the relevant kind of *network control ancillary service*, taking into account the need to:
  - (1) subject to clause 3.11.5(h)(2), so far as practicable minimise the overall cost of supply of that service; and
  - (2) appropriately remunerate the providers of the relevant *network control ancillary service* for that service.
- (i) If *NEMMCO* and the *Registered Participants* selected by *NEMMCO* cannot agree on the terms and conditions for the supply of a *network control ancillary service* after 21 *business days* from delivery to the *Registered Participant* of a written notice to negotiate, then either *NEMMCO* or the *Registered Participant* may refer the matter to an *Adviser* for the determination of a dispute as to those terms and conditions in accordance with rule 8.2.
- (j) Subject to clause 3.11.5(k), *NEMMCO* must not acquire *non-market ancillary services* from any person who is not a *Registered Participant*.
- (k) *NEMMCO* may enter into an agreement to acquire *non-market ancillary services* with a person who is not a *Registered Participant* if that agreement includes a condition for the benefit of *NEMMCO* that no *ancillary services* will be provided under the agreement until that person becomes a *Registered Participant*.
- (l) If *NEMMCO* calls for offers under clause 3.11.5(a) in respect of a type of *non-market ancillary service*, *NEMMCO* must give notice to *Registered Participants* when it believes that it has available, under *ancillary services*

*agreements*, a sufficient quantity of that type of *non-market ancillary service* (as determined by applying the procedure developed under clause 3.11.4(b) or clause 3.11.4A(f), whichever is relevant).

- (m) Within 5 *business days* of *NEMMCO* giving a notice under clause 3.11.5(l), *NEMMCO* must *publish* the total quantity of each kind of *network control ancillary service* acquired by *NEMMCO* under *ancillary services agreements* under clause 3.11.5.
- (n) Within 5 *business days* of *NEMMCO* giving a notice under clause 3.11.5(l), *NEMMCO* must *publish*:
  - (1) the total estimated annual cost for the provision of *system restart ancillary services*, broken down to charges for availability and use, or other factors that *NEMMCO* considers appropriate for each *electrical sub-network*; and
  - (2) the number of those services procured for each *electrical sub-network*.
- (o) A *Registered Participant* must comply with an *ancillary services agreement* between the *Registered Participant* and *NEMMCO* under which the *Registered Participant* provides one or more *non-market ancillary services*.
- (p) A dispute concerning any aspect, (other than the aspect of price), of a *system restart ancillary services agreement* or a tender conducted by *NEMMCO* for the acquisition of *system restart ancillary services*, must be dealt with in accordance with rule 8.2.

### **3.11.6 Procedures for the dispatch of non-market ancillary services by NEMMCO**

- (a) *NEMMCO* must develop procedures for:
  - (1) dispatching each kind of *non-market ancillary service* *NEMMCO* requires in order to maintain the *power system* in a *secure operating state*; and
  - (2) reporting to *Registered Participants*, on a periodic basis, on the effectiveness of the *dispatch* of *non-market ancillary services* using criteria related to the performance of the *power system* specified in the procedures developed pursuant to clause 3.11.6(a)(1).
- (b) *NEMMCO* must make the procedures developed under this clause 3.11.6 available to the *Registered Participants*.
- (c) *NEMMCO* may amend a procedure developed under this clause 3.11.6, from time to time.
- (d) *NEMMCO* must comply with the *Rules consultation procedures* when making or amending procedures pursuant to clause 3.11.6.

### 3.11.7 Performance and testing

- (a) 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 *market load* as an *ancillary service load* must install and maintain in accordance with the standards referred to in clause 3.11.7(b) 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*.
- (b) *NEMMCO* 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 clause 3.11.7(a).
- (c) *NEMMCO* may request a *Market Participant* with an *ancillary service generating unit* or an *ancillary service load* to provide to *NEMMCO* 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 clause 3.11.7(c) promptly but, in any event, in no more than 20 *business days* after notice to do so.
- (d) *NEMMCO* may from time to time require a *Registered Participant* which provides a *market ancillary service* under the *Rules* or a *non-market ancillary service* under an *ancillary services agreement* to demonstrate the relevant *plant's* capability to provide the *ancillary service* to the satisfaction of *NEMMCO* according to standard test procedures. A *Registered Participant* must promptly comply with a request by *NEMMCO* under this clause.

## 3.12 Market Intervention by NEMMCO

### 3.12.1 Intervention settlement timetable

- (a) *NEMMCO* must use reasonable endeavours to complete and fulfil its obligations set out in clauses 3.12.2, 3.12.3, 3.15.7, 3.15.7A, 3.15.7B, 3.15.8 and 3.15.10C as soon as practicable and no later than:
  - (1) 100 *business days* after the end of the *NEMMCO intervention event* or the end of a series of related *NEMMCO intervention events* if *NEMMCO* is not required to appoint an independent expert pursuant to clause 3.15.7A; and
  - (2) 150 *business days* after the end of the *NEMMCO intervention event* or the end of a series of related *NEMMCO intervention events* if *NEMMCO* is required to appoint an independent expert pursuant to clause 3.15.7A.
- (b) Subject to clause 3.12.1(a), *NEMMCO* must *publish* a timetable that sets a date for each of *NEMMCO's* and the independent expert's obligations pursuant to clauses 3.12.2, 3.12.3, 3.15.7, 3.15.7A, 3.15.7B, 3.15.8 and 3.15.10C, where required (the "*intervention settlement timetable*").
- (c) *NEMMCO* 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 NEMMCO intervention

- (a) In respect of each *intervention price trading interval*:
- (1) an *Affected Participant* is entitled to receive from NEMMCO, or must pay to NEMMCO, 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 NEMMCO *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 NEMMCO *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 *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 *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 offer* 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 NEMMCO reasonably determines would have been consumed by the *scheduled load* if the NEMMCO *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.

- (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, *NEMMCO* 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*, *NEMMCO* 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 *NEMMCO intervention event* not occurred; and
    - (ii) an amount equal to:
      - (A) the estimated *trading amount* that it would have received had the *NEMMCO 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 *NEMMCO 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 *NEMMCO 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 *NEMMCO* in accordance with paragraph (a)(2) for that *Market Customer*.
- (d) *NEMMCO* must include in an *Affected Participant's* or *Market Customer's final statement* provided pursuant to clause 3.15.1 for a *billing period* in which one or more *intervention price trading intervals* occurred:
  - (1) the amount notified by *NEMMCO* 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 *NEMMCO* by the relevant person; and
    - (2) positive, the absolute value of that amount is the amount receivable from *NEMMCO* by the relevant person.
  - (f) Subject to paragraphs (h) and (i), within 7 *business days* of receipt of the notice referred to in paragraph (c) an *Affected Participant* or *Market Customer* may make a written submission to *NEMMCO* in accordance with paragraph (g) claiming that the amount set out in the notice is greater than, less than, or equal to 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 *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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 *NEMMCO 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) *NEMMCO* 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 *NEMMCO intervention event*, or in respect of, in *NEMMCO’s* reasonable opinion, a series of related *NEMMCO 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 *NEMMCO intervention event*, or in respect of that series of related *NEMMCO intervention events*.
- (l) *NEMMCO* 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 *NEMMCO* determines pursuant to paragraph (l) that an *affected participant’s adjustment claim* or *market customer’s additional claim* in respect of a *NEMMCO 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 *NEMMCO 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 NEMMCO**

- (a) Subject to clause 3.12.3(a1), if a matter is to be referred to an independent expert pursuant to clauses 3.12.2(l), 3.12.2(m) or 3.15.7B, *NEMMCO* 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 *NEMMCO's* nominee pursuant to clause 3.12.3(a) more than 25% of the *Referred Affected Participants*, *Referred Market Customers* and *Referred Directed Participants* in relation to that *direction* object in writing to *NEMMCO's* nominee *NEMMCO* 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 *NEMMCO*, nominate an independent expert to be appointed by *NEMMCO* for the purposes of this clause 3.12.3.
- (b) *NEMMCO* must provide to the independent expert a copy of all written submissions made by *Referred Affected Participants*, *Referred Market Customers* or *Referred Directed Participants* under clause 3.12.2(f) or 3.15.7B (a).
- (b1) To the extent reasonably practicable, all claims arising out of a single *NEMMCO intervention event* or arising out of, in *NEMMCO's* reasonable opinion, a series of related *NEMMCO intervention events*, should be determined by the same independent expert as part of the same process.
- (c) *NEMMCO* 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*;
- (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 clauses 3.12.3(c)(1)(ii) and 3.12.3(c)(1)(iii);
- (ii) notify individual assessments by delivery to each *Referred Affected Participant* and *Referred Market Customer* and to *NEMMCO* 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); and
  - (iii) deliver to each *Referred Directed Participant* and to *NEMMCO* a draft assessment detailing the calculation of the amount of compensation receivable by that party pursuant to 3.15.7B.
- (2) The independent expert must call for submissions from all relevant *Referred Affected Participants*, *Referred Market Customers* and *Referred Directed Participants* after *publishing* the draft report and delivering the draft assessment under clause 3.12.3(c)(1).
- (3) Before the *publication* of the final report and delivery of the final assessment pursuant to clause 3.12.3(c)(4), the independent expert must:
- (i) if requested to do so by a *Referred Affected Participant*, *Referred Market Customer* 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*, 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* 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) or 3.15.7B, as the case may be; and

- (iii) deliver to *NEMMCO* a final tax invoice for the services rendered by the independent expert and a copy of all final assessments issued pursuant to clause 3.12.3(c)(ii).
- (5) A report prepared under clauses 3.12.3(c)(1)(i) and 3.12.3(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* or *Referred Directed Participant* under clause 3.12.2(f) 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* and *Referred Directed Participant* in a form developed by *NEMMCO* pursuant to clause 3.12.3(e).
- (d) A final report and a final assessment of an independent expert prepared in accordance with clause 3.12.3(c)(4) is final and binding.
- (e) *NEMMCO* 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) *NEMMCO* 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 *NEMMCO* of capacity the subject of *restriction offers*;
  - (2) the standard terms and conditions upon which *NEMMCO* shall accept a *restriction offer*;
  - (3) the criteria to be applied by *NEMMCO* 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) *NEMMCO* 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 *registered bid and offer data* for that *scheduled generating unit* or *scheduled network service*.
  - (2) *NEMMCO* 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) *NEMMCO* 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 *NEMMCO* for the purpose of the submission of *restriction offers*.
  - (5) If a *restriction offer* is made in accordance with the *restriction offer procedures*, *NEMMCO* 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 *registered bid and offer data* provided by the relevant party then *NEMMCO* 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) *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* in accordance with the *restriction offer procedures* of a revocation or variation. Immediately upon receipt of such notification *NEMMCO* 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 *NEMMCO* 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 3.12.A.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) *NEMMCO* must, within 4 hours of receipt of a formal written notice from a *Jurisdictional Co-ordinator* 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 Co-ordinator* 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) *NEMMCO* must regularly in conjunction with the relevant *Jurisdictional Co-ordinator* review the current *mandatory restriction schedule* and when appropriate prepare and deliver to the *Jurisdictional Co-ordinator* 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) *NEMMCO* 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 Co-ordinator*.

### 3.12A.3 Acquisition of capacity

- (a) *NEMMCO* 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) *NEMMCO* 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).

#### **3.12A.5 Dispatch of restriction offers**

- (a) In a *dispatch interval* *NEMMCO* 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 *NEMMCO* 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 *NEMMCO 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 *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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) *NEMMCO* 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) *NEMMCO* must, as soon as reasonably practicable following the end of a *mandatory restriction period*, calculate:
  - (i) the aggregate amount payable to *NEMMCO* pursuant to clause 3.12A.7(a) from all *accepted restriction offers* in that *mandatory restriction period*;
  - (ii) the aggregate amount payable by *NEMMCO* 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 *VoLL* 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 *VoLL* 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 *NEMMCO* 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 *NEMMCO* an amount determined in accordance with clause 3.12A.7(f) or 3.12A.7(g).
- (f) If the *restriction shortfall amount* is between minus \$100,000 and \$0, then each *Market Customer* in the relevant *region* must pay to *NEMMCO* an amount determined in accordance with the following formula:

$$MCP = RSA \quad \times \quad \frac{(AGE)}{(AAGE)}$$

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 NEMMCO an amount determined in accordance with the following formula:

$$RCP = (RSA + IE) \times (RD/TRD)$$

Where

RCP is the amount payable to NEMMCO by a *Market Customer* in that *region* following the cessation of the *mandatory restriction period*.

RSA is the *restriction shortfall amount* incurred by NEMMCO 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 NEMMCO in accordance with clause 3.12A.7(i)(11) plus any amounts payable by NEMMCO on behalf of the independent expert as determined by the *dispute resolution panel* established in accordance with clause 3.12A.7(m); and

(ii) NEMMCO must within 10 days of the end of a *mandatory restriction period* appoint an appropriately qualified independent expert as NEMMCO'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 NEMMCO must pay to *Market Customers* in the relevant *region* an amount equal to:

$$RCRP = RSA \times \frac{(AGE)}{(AAGE)}$$

Where:



- RCRP is the payment to be made by *NEMMCO* 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), *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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 experts 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 *NEMMCO* 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 *NEMMCO* 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.
- (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
  - (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 *NEMMCO* 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*, *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* under the *Rules* to provide information, *NEMMCO* 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) *NEMMCO* 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 *NEMMCO* and by *NEMMCO* 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 *NEMMCO* and by *NEMMCO* by means of the backup procedures specified by *NEMMCO* from time to time; or
  - (2) otherwise approved by *NEMMCO*.

- (b) Information must be provided by using the templates supplied in the *electronic communication system* unless otherwise approved by *NEMMCO*.
- (c) Where approved by *NEMMCO*, information may be transmitted to and from *NEMMCO* and the *Scheduled Generator, Semi-Scheduled Generator* or *Market Participant* concerned in any agreed format.
- (d) If possible, information provided to *NEMMCO* must be *time stamped* by *NEMMCO* on receipt by *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* of, and *NEMMCO* must *publish*, any *changes* to submitted information within the times prescribed in the *timetable*.
- (i) *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* under the *Rules* where that information is generally available.

### 3.13.3 Standing data

- (a) *NEMMCO* 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 the *Scheduled Generator*, *Semi-Scheduled Generator* and *Market Participant* information as set out in schedule 3.1;
  - (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*;
  - (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 *NEMMCO* with the *registered bid and offer data* relevant to their *scheduled loads*, *scheduled network services* and *generating units* in accordance with schedule 3.1.
- (c) All *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* will be required to provide *NEMMCO* with information as set out below:
  - (1) forecasts for *connection points* as prescribed in clause 5.6.1; and
  - (2) *metering* information for *settlements* purposes as prescribed in Chapter 7.
- (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 *NEMMCO* on request and in a form specified by *NEMMCO*.
- (e) *Network Service Providers* must, without delay, notify and provide *NEMMCO* 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 *NEMMCO*, *Network Service Providers* must provide *NEMMCO* 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 *NEMMCO*; and
- (3) operating procedures and practices for *network* operation and maintenance.
- (g) *Network Service Providers* must notify *NEMMCO* 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 *NEMMCO* of any *changes* to *registered bid and offer data* one month prior to the implementation of planned *changes* and without unreasonable delay in the event of unplanned *changes*.
  - (i) *Network Service Providers* must notify *NEMMCO* 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) *NEMMCO* must conduct an annual review of *Scheduled Generator, Semi-Scheduled Generator* and *Market Participant registered bid and offer data* in consultation with *Scheduled Generators, Semi-Scheduled Generators* and *Market Participants* and *Scheduled Generators, Semi-Scheduled Generators* and *Market Participants* must advise *NEMMCO* of any required *changes* to the data.
  - (k) A *Registered Participant* may request from *NEMMCO*:
    - (1) *registered bid and offer data*;
    - (2) information that is reasonably required by the *Registered Participant* to carry out *power system* 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.
  - (l) If *NEMMCO* holds information requested under clause 3.13.3(k), *NEMMCO* must provide the requested information to the *Registered Participant* as soon as practicable, subject to the following requirements:
    - (1) If *NEMMCO* holds and is required under this paragraph (l) to provide a *releasable user guide* that *NEMMCO* received under clause S5.2.4(b)(8), *NEMMCO* must provide the *releasable user guide* to the *Registered Participant* in an unaltered form.
    - (2) If *NEMMCO* holds and is required under this paragraph (l) to provide a form of the model source code that *NEMMCO* received under clauses S5.2.4(b)(6) and S5.2.4(d) or from any other source, *NEMMCO* must provide that information:

- (i) only in the form of, at *NEMMCO'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 *NEMMCO* has the written consent of the person who provided the information to *NEMMCO* to provide it in another form; and
  - (ii) in a form that can be interpreted by a software simulation product nominated by *NEMMCO*.
- (3) Any information provided by *NEMMCO* under clause 3.13.3(l) to a *Registered Participant* must be treated as *confidential information*.
- (11) *NEMMCO* may charge a fee, except where the information is requested by a *Network Service Provider* under clause 3.13.3(15), 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 *NEMMCO* by a *Network Service Provider* and that same *Network Service Provider* advises *NEMMCO* 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 *NEMMCO* that the provider of the model source code is itself; or
  - (5) otherwise, the relevant Transmission Network Service Provider.
- (13) If *NEMMCO* is required under clause 3.13.3(l) to provide information requested under clause 3.13.3(k)(2), *NEMMCO* may provide:
- (1) historical information relating to the operating conditions of the *power system*;



- (2) information and data provided to *NEMMCO* 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), *NEMMCO* must not provide information relating to *plant* that is the subject of an *application to connect* or a *connection agreement*, until the later of:
- (1) the date when the relevant *connection agreement* is executed; and
  - (2) three months before the proposed start of commissioning of that *plant*.
- (15) Subject to clause 3.13.3(16), if a *Transmission Network Service Provider* is responsible for provision of *network* limit advice relating to *power system* stability limits to *NEMMCO* under clause S5.1.2.3, *NEMMCO* 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 *NEMMCO* holds that information, including:
- (1) functional block diagram information, including information provided to *NEMMCO* 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 *NEMMCO* in accordance with clause S5.2.4(a).
- (16) If *NEMMCO* is required to provide information to a *Transmission Network Service Provider* under paragraph (15), this must not include:
- (1) model source code provided to *NEMMCO* 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 *NEMMCO* under clause 3.13.3(15) to a *Transmission Network Service Provider* must be treated as *confidential information*.

- (m) Where special approvals or exemptions have been granted by *NEMMCO*, 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 *NEMMCO*.
- (n) *NEMMCO* 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 *NEMMCO* of their *distribution loss factors*, duly authorised by the *AER*, and *NEMMCO* must *publish* such *distribution loss factors* in accordance with clause 3.6.3(i).
- (p) *NEMMCO* 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) *NEMMCO* must establish, maintain and *publish* a register which identifies:
  - (1) the *Registered Participant* to whom any information is provided under clause 3.13.3(1); and
  - (2) the date on which such information was provided.

### **Statement of opportunities**

- (q) By 31 October in each year, *NEMMCO* 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) generating capabilities of existing *generating units* and *generating units* for which formal commitments have been made for construction or installation;
  - (3) planned *plant* retirements;
  - (4) a summary of *network capabilities* and *constraints* based upon *Annual Planning Reports*; and
  - (5) 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*.
- (r) If after the publication of the most recent *statement of opportunities*, significant new information becomes available to *NEMMCO* relating to:
  - (1) the matters covered by paragraphs (q)(1),(2) and (3); or
  - (2) the matters covered by clause 5.6.5(c)(8) and (9),

*NEMMCO* must, as soon as practicable, *publish* that information in a descriptive form that is consistent with the *statement of opportunities*.
- (s) In preparing a *statement of opportunities* *NEMMCO* may seek the assistance of the *Inter-regional Planning Committee*.
- (t) As soon as practicable after a *Scheduled Generator, Semi-Scheduled Generator Market Participant* or *Network Service Provider* becomes aware of any information required for *publication* by *NEMMCO* under paragraph (q), that information must be provided to *NEMMCO* by that *Scheduled Generator, Market Participant* or *Network Service Provider*.
- (u) By 1 November each year, *NEMMCO* must prepare and provide a report to the *Reliability Panel* on:
  - (1) the accuracy of the demand forecasts to date in the most recent *statement of opportunities*; and
  - (2) any improvements made by *NEMMCO* or other relevant parties to the forecasting process that will apply to the next *statement of opportunities*.
- (v) The *Reliability Panel* must *publish* each report provided to it under paragraph (u) within ten *business days* after being provided with that report.

#### **3.13.4 Spot market**

- (a) Each week, in accordance with the *timetable*, *NEMMCO* must *publish* details of the outcome of the *medium term PASA*.
- (b) The details to be *published* by *NEMMCO* 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*, *NEMMCO* must *publish* details of the outcome of the *short term PASA* for each *trading interval* covered.
- (d) The details of the *short term PASA* *published* each *day* by *NEMMCO* 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*, *NEMMCO* 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 *NEMMCO* 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) when and where the projected conditions are found to be inadequate;

- (ii) any *trading intervals* for which *low reserve* or *lack of reserve* conditions are forecast to apply;
  - (iii) 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*;
  - (iv) forecast *interconnector* transfer capabilities and the projected impact of any *inter-network tests* on those transfer capabilities; and
  - (v) when and where *network constraints* may become binding on the *dispatch* of *generation* or *load*.
- (g) Each *day*, in accordance with the *timetable*, *NEMMCO* 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*, *NEMMCO* 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 *NEMMCO* results in a significant *change* in forecast *spot price*, or in any event no more than 3 hours after the previous such publication, *NEMMCO* must prepare and *publish* updated *pre-dispatch schedules* and *spot price forecasts*, including the details specified in clause 3.13.4(f).
- (j) If *NEMMCO* considers there to be a significant change in a forecast *spot price*, *NEMMCO* 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) *NEMMCO* 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 *NEMMCO* runs the *dispatch algorithm*, *NEMMCO* 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*, *NEMMCO* must *publish* the *regional reference prices* for each *region* for that *trading interval*.
- (n) Each *day*, in accordance with the *timetable*, *NEMMCO* must *publish* the actual *regional reference prices*, *ancillary service prices*, *regional* and total *interconnected system loads* and *energies*, *inter-regional flows*, *inter-regional loss factors* and details of any *network constraints* for each *trading interval* in the previous *trading day*.

- (o) Within 2 *business days* of an event whereby a *scheduled generating unit* or *semi-scheduled generating unit* has been *constrained off* or in the case of a *scheduled generating unit, constrained on*, in the *central dispatch* by a *network constraint* within its own *region*, NEMMCO must advise the *Scheduled Generator* or *Semi-Scheduled Generator* and *Network Service Provider*, with whom the relevant *Generator* has a *connection agreement* in respect of that *generating unit*, of the following information:
- (1) the *dispatch intervals* in which the *constraint* applied; and
  - (2) NEMMCO's reasonable estimate of the MW quantities at which the *generating unit* would otherwise have been *dispatched* in each relevant *trading interval* in accordance with its *dispatch offer* and in the absence of the *network constraint*.
- (p) Each *day*, in accordance with the *timetable*, NEMMCO 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 NEMMCO'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*, NEMMCO must *publish* details of:
- (1) actual *generation*, *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) Each *day*, in accordance with the *timetable*, *NEMMCO* must publish details of actual *generation* for each *non-scheduled generating unit* or *non-scheduled generating system*, in each *trading interval* for the previous *trading day*.
- (s) Where *NEMMCO* publishes details as referred to in clause 3.13.4(r), the requirement to *publish* applies only to data available to *NEMMCO*.
- (t) *NEMMCO* 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 *NEMMCO* runs the *dispatch algorithm* it must, within 5 minutes, *publish* for the relevant *dispatch interval*:
  - (1) details of any MW allowance made by *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* publishes the information referred to in clause 3.13.4(u), the requirement for *NEMMCO* to *publish* applies only to data available to *NEMMCO*.
- (w) Each *day*, in accordance with the *timetable*, *NEMMCO* 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*, *NEMMCO* 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, *NEMMCO* 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 NEMMCO under paragraph (e).

(z) At intervals to be determined by NEMMCO under rule 3.7A(e), NEMMCO must, in accordance with the timetable, publish updates to the congestion information resource.

### 3.13.4A Market ancillary services

- (a) NEMMCO 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) NEMMCO 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.
- (c) NEMMCO 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 NEMMCO

- (a) NEMMCO must *publish* annually the costs of all of its operations associated with the acquisition of *market ancillary services* and *non-market ancillary services*.
- (b) NEMMCO must *publish* annually the quantities and categories of *non-market ancillary services* covered under existing *ancillary services agreements* and the additional quantities of *non-market ancillary services* for which NEMMCO expects to enter into *ancillary services agreements* within the ensuing 12 months.
- (c) Information published under clauses 3.13.5(a) or (b) must include:
  - (1) the costs and quantities associated with each category of *ancillary service* purchased or to be purchased; and
  - (2) where possible, the *regions* in respect of which costs were or are expected to be incurred and *ancillary services* were or are expected to be provided.

### 3.13.5A Settlement residue auctions

- (a) If NEMMCO conducts an *auction* under rule 3.18, NEMMCO 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) *NEMMCO* 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 *settlement residue* attributable to *intra-regional loss factors* for each *region*, for that *billing period*.
- (c) *NEMMCO* 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 NEMMCO

- (a) *NEMMCO* 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 *NEMMCO* to issue the *direction*;
  - (5) if applicable, the basis upon which *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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, *NEMMCO* 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 *NEMMCO*, 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 *NEMMCO* 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 20 *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 *market ancillary service* prices exceeding \$5,000/MWh;
  - (4) identifies any linkages between *spot prices* in the *energy market* and *market 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) NEMMCO 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*.
  - ~~(5) *inter regional and intra regional network constraints* by *trading interval*.~~
- (b) All *market information* that NEMMCO is required to *publish* in accordance with the *Rules* shall also be made available by NEMMCO to persons other than *Registered Participants* using the *electronic communications system* on the fee basis described in clause 8.7.6. NEMMCO 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) *NEMMCO* must make available for purchase by any party the *statement of opportunities* from the date of *publication* of such statement.
- (d) *NEMMCO* 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) *NEMMCO* must appoint one or more *market auditors* to carry out *reviews* of such matters as *NEMMCO* 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 *NEMMCO* procedures and their compliance with the *Rules*.
- (b) *NEMMCO* 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 *NEMMCO*. *NEMMCO* 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 *NEMMCO* approves and those matters which *NEMMCO* does not approve and setting out *NEMMCO's* reasons for that view.
- (e) *NEMMCO* 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**

- (a) The authority responsible for administering the *jurisdictional electricity legislation* in for each *participating jurisdiction* may provide *NEMMCO* 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 *NEMMCO* in relation to *connection points* in that *participating jurisdiction*; and
- (2) *NEMMCO* 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 *NEMMCO*.
- (c) A valid *Jurisdictional NMI Standing Data schedule* must contain the following items:
  - (1) a specification of the categories of *NMI Standing Data* which *NEMMCO* 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 *NEMMCO*;
  - (4) the criteria which *NEMMCO* must use to identify whether *NEMMCO* must disclose *NMI Standing Data* for *connection points* in that *participating 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 *NEMMCO* of *NMI Standing Data* for *connection points* in that *participating jurisdiction*.
- (d) *NEMMCO* 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) *NEMMCO 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 NEMMCO 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 NEMMCO under clause 3.13.12(a):*
- (1) *at no charge and in the format reasonably required by NEMMCO; 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 NEMMCO will use and disclose the NMI Standing Data in accordance with the Rules.*
- (g) *Market Customers must only use NMI Standing Data provided to it by NEMMCO under this clause 3.13.12 for the purposes permitted by the relevant Jurisdictional NMI Standing Data schedule.*
- (h) *Where a responsible authority has provided NEMMCO 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 NEMMCO with NMI Standing Data in accordance with clause 3.13.12(f) and NEMMCO becomes aware of that failure, then:*
- (1) *NEMMCO 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 NEMMCO with the NMI Standing Data within 5 business days of the notice provided under clause 3.13.12(h)(1), NEMMCO 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 *NEMMCO* otherwise in accordance with clause 3.13.12(h)(3); and
- (3) if, after receiving a notice from *NEMMCO* under clause 3.13.12(h)(2), the responsible authority notifies *NEMMCO* 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 *NEMMCO*, *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* becomes aware of that failure, then:
    - (1) *NEMMCO* 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), *NEMMCO* 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 *NEMMCO* otherwise in accordance with clause 3.13.12(i)(3); and
    - (3) if, after receiving a notice from *NEMMCO* under clause 3.13.12(i)(2), the responsible authority notifies *NEMMCO* 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*, *NEMMCO* 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) *NEMMCO* must if requested by a responsible authority:
    - (1) develop a regime for monitoring and reporting to the responsible authority on requests received by *NEMMCO* 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 *NEMMCO* to make available *NMI Standing Data* if that *NMI Standing Data* has not been provided to *NEMMCO*;
  - (2) requires *NEMMCO* to make available *NMI Standing Data* where the collection, use or disclosure of that information by *NEMMCO* would breach applicable privacy laws;
  - (3) precludes *NEMMCO* 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 *NEMMCO* from disclosing the information in the circumstances described in clause 8.6.2; and
  - (5) requires *NEMMCO* to provide information which its software systems cannot provide without modification.

### **3.13.13 Inter-network tests**

- (a) *NEMMCO* 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 *NEMMCO* amends the *test program* for an *inter-network test* it must *publish* details of the amendment.
- (c) If *NEMMCO* 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, *NEMMCO* must *publish* details of the change.

## **3.14 Administered Price Cap and Market Suspension**

### **3.14.1 Cumulative Price Threshold and Administered Price Cap**

- (a) In conjunction with each *participating jurisdiction*, and after consulting *Market Participants* in accordance with the *Rules consultation procedures*, the *AEMC* must develop, authorise and *publish* and may vary from time to time a schedule to specify an *administered price cap* for each *region* to apply to *spot prices* and *market ancillary service prices* and to be used as described in this rule 3.14.
- (b) The *administered floor price* for each *region* to apply to *spot prices* and to be used as described in clause 3.14.2 will be the negative of the value of the *administered price cap*.
- (c) The *cumulative price threshold* is \$150,000/MWh.

### **3.14.2 Application of Administered Price Cap**

- (a) **[Deleted]**



- (b) *NEMMCO* must immediately notify all *Market Participants* of the commencement and closing of an *administered price period* under rule 3.14.
- (c) A *trading interval* is to be an *administered price period* if in a *region*:
  - (1) the sum of the *spot price* in the previous 336 *trading intervals*, calculated as if this clause did not apply, exceeds the *cumulative price threshold*;
  - (1A) the sum of the *ancillary service price* 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) the *trading interval* occurs in a *trading day* in which a prior *trading interval* is an *administered price period* under this clause 3.14.2; or
  - (3) the previous *trading interval* was an *administered price period* and in *NEMMCO*'s opinion one or more *trading intervals* in the next *business day* will be an *administered price period* and *NEMMCO* deems, with the consent of the *AER*, the *trading interval* to be an *administered price period*.
- (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 clauses 3.14.2(c)(1), (2) or (3) 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 *NEMMCO* must set the *dispatch price* to the *administered price cap*; or
  - (2) is less than the *administered floor price*, *NEMMCO* must set the *dispatch price* to the *administered floor price*.
- (d2) If within an *administered price period* an *ancillary service price* for a *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 *NEMMCO* 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, the *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 product of the *administered price cap* multiplied by the *average loss factor* for that *dispatch interval* between that *regional reference node* and the *regional reference node* at which *dispatch prices*

have been set to the *administered price cap* 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, 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 be equal to or greater than the product of the *administered floor price* multiplied by the average *loss factor* for that *dispatch interval* between that *regional reference node* and the *regional reference node* at which *dispatch prices* have been set to the *administered floor price* determined in accordance with clause 3.14.2(e)(5).
- (5) *NEMMCO* 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), *NEMMCO* 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) *NEMMCO* 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) *NEMMCO* 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) If *NEMMCO* declares the *spot market* to be suspended in a *region*, then all *spot prices* and *ancillary service prices* are set in accordance with clause 3.14.5 for that *region*.
- (b) *NEMMCO* must not suspend the *spot market* solely because:
  - (1) *spot prices* have reached *VoLL*;
  - (1A) *spot prices* have reached the *market floor price*;
  - (2) *NEMMCO* has issued a *direction*; or
  - (3) *NEMMCO* has otherwise intervened in the market under rule 3.12.
- (c) *NEMMCO* 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 clause 3.14.3(c) must be made available to *Registered Participants* and the public.
- (e) A *Registered Participant* must co-operate in any such review conducted by NEMMCO (including making available relevant records and information).
- (f) A *Registered Participant* must provide to NEMMCO such information relating to the performance of its equipment during and after a suspension of the *spot market* as NEMMCO reasonably requires for the purposes of analysing or reporting on that suspension.
- (g) NEMMCO 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 NEMMCO is required to conduct a review under this clause 3.14.3.

#### **3.14.4 Declaration of market suspension**

- (a) The *spot market* can only be suspended by a declaration by NEMMCO under clause 3.14.3(a) and if the *spot market* is suspended, NEMMCO must notify all *Registered Participants* without delay.
- (b) NEMMCO must not declare the *spot market* to be suspended retrospectively.
- (c) The *spot market* is to be deemed to be suspended at the start of the *trading interval* in which NEMMCO makes a declaration that the *spot market* is suspended.
- (d) Following a declaration by NEMMCO under clause 3.14.3(a), the *spot market* is to remain suspended until NEMMCO 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 NEMMCO declares that the *spot market* is suspended:
  - (1) NEMMCO may then issue *directions* to *Registered Participants* in accordance with clause 4.8.9; and
  - (2) *spot prices* and *ancillary service prices* are to be set by NEMMCO in accordance with clause 3.14.5.
- (f) NEMMCO must within 10 *business days* following the day on which, in accordance with the notice given by NEMMCO under clause 3.14.4(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*. *NEMMCO* 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) If *NEMMCO* declares that the *spot market* is suspended then, as far as *NEMMCO* considers it practically and reasonably possible, it must follow the procedures in the *Rules* for *PASA*, *dispatch* and *spot price* and *ancillary service price*, subject to the application of clause 3.14.5.
- (b) The *spot price* and the *ancillary service price* during a *trading interval* for which *NEMMCO* has declared the *spot market* to be suspended is to be determined by *NEMMCO* in accordance with clause 3.14.5.
- (c) Subject to clauses 3.14.5(d), (g) and (j), if the *spot market* is suspended in a *region* then *dispatch* and the determination of *spot prices* and *ancillary service prices* in the *region* where the *spot market* is suspended are to continue in accordance with rules 3.8 and 3.9.
- (d) If at any time on or during suspension of the *spot market* in a *region*:
  - (1) in *NEMMCO*'s reasonable opinion it is not possible to continue *dispatch* and the determination of *spot prices* in the *suspended region* in accordance with rules 3.8 and 3.9;
  - (2) the *suspended region* is *connected* by an *unconstrained interconnector* to another *region*;
  - (3) the *dispatch* and determination of *spot prices* and *ancillary service prices* in the other *region* is continuing in accordance with rules 3.8 and 3.9; and
  - (4) *local market ancillary service requirements* do not apply in the *suspended region*,

*NEMMCO* must:

  - (5) determine the *spot price* in the *suspended region* in accordance with clause 3.14.5(e); and
  - (6) continue to determine *ancillary service prices* in the *suspended region* in accordance with rules 3.8 and 3.9.
- (e) In the circumstances described in clause 3.14.5(d) the *spot price* is to be determined by application of an appropriate *inter-regional loss factor* to the *spot price* in the adjacent *region* referred to in clause 3.14.5(d)(2), such *inter-regional loss factor* being determined by *NEMMCO* in accordance with the methodology in clause 3.6.2A and the actual flows on the relevant *unconstrained interconnectors*.

- (f) If the *spot price* in the *suspended region* is being determined in accordance with clause 3.15.4(e), the *spot price* must continue to be determined in accordance with that clause until the earlier of:
- (1) the time that the *spot market* is no longer suspended in the *region*; and
  - (2) the time that the *spot price* in the *region* is required to be determined in accordance with either clause 3.14.5(g) or clause 3.14.5(j).
- (g) If at any time during suspension of the *spot market* in a *region*:
- (1) either:
    - (A) *dispatch* and the determination of *spot prices* and *ancillary service prices* is being effected in accordance with rules 3.8 and 3.9; or
    - (B) the *spot prices* and *ancillary service prices* in the *suspended region* are being determined in accordance with clause 3.14.5(e); and
  - (2) in *NEMMCO's* reasonable opinion it is no longer practical to continue *dispatch* and the determination of *spot prices* and *ancillary service prices* in the *suspended region* in accordance with the clauses under which *dispatch*, *spot prices* and *ancillary service prices* are currently being determined; and
  - (3) in *NEMMCO's* reasonable opinion a current *pre-dispatch schedule* exists in respect of the *suspended region*,
- then *NEMMCO* must determine the *spot prices* and *ancillary service prices* in the *suspended region* in accordance with clause 3.14.5(h).
- (h) In the circumstances described in clause 3.14.5(g), the *spot prices* and *ancillary service prices* in the *suspended region* are set at *NEMMCO's* forecast *regional reference price* and *ancillary service prices* determined in accordance with the most recently *published pre-dispatch schedule* if it is still current.
- (i) If the *spot prices* and *ancillary service prices* in the *suspended region* are being determined in accordance with clause 3.15.4(h), they must continue to be determined in accordance with that clause until the earlier of:
- (1) the time that the *spot market* is no longer suspended in the relevant *region*; and
  - (2) the time that the *spot prices* or the *ancillary service prices* (as the case may be) in the *suspended region* are determined in accordance with clause 3.14.5(j).
- (j) If at any time on or during suspension of the *spot market* in a *region*:
- (1) either:
    - (A) *dispatch* and the determination of *spot prices* and *ancillary service prices* is being effected in accordance with rules 3.8 and 3.9; or

- (B) the *spot prices* and *ancillary service prices* in the *suspended region* are being determined in accordance with either clause 3.14.5(e) or clause 3.14.5(h); and
- (2) in *NEMMCO's* reasonable opinion it is no longer practical to set the *spot prices* and *ancillary service prices* in the *suspended region* in accordance with either clauses rules 3.8, 3.9, clause 3.14.5(e) or clause 3.14.5(h) (as the case may be),
- then *NEMMCO* must set the *spot prices* and *ancillary service prices* in the *suspended region* at the prices set out in the relevant market suspension pricing schedule developed and published in accordance with clause 3.14.5(l).
- (k) If the *spot prices* and *ancillary service prices* in the *suspended region* are being determined in accordance with clause 3.15.4(j), they must continue to be determined in accordance with that clause until the *spot market* is no longer suspended in that *region*.
- (l) *NEMMCO* must:
- (1) develop in accordance with the *Rules consultation procedures* a methodology to be used by *NEMMCO* (**estimated price methodology**) to prepare and update schedules containing reasonable estimates of typical *market prices* during the periods to which the schedules relate (**estimated price schedules**);
  - (2) develop and update estimated price schedules in accordance with the estimated price methodology and that set out *NEMMCO's* reasonable estimate of typical *market prices* during periods in which the *spot market* is suspended; and
  - (3) *publish* the estimated price methodology promptly after it has been developed and *publish* the estimated price schedule at least 14 days prior to the first day to which the schedule relates.
- (m) If a *spot price* is set in accordance with clause 3.14.5(g) or clause 3.14.5(j) at a *regional reference node* (**suspension node**), *spot prices* at all other *regional reference nodes connected* by an *interconnector* that has an actual flow towards the suspension node must not exceed the *spot price* in the *suspended region* multiplied by the average *loss factor* between that *regional reference node* and the *suspension node* for that *trading interval*.
- (n) *NEMMCO* must use reasonable endeavours to ensure that any adjustments required to *regional reference prices* so that they do not exceed the limits set by clause 3.14.5(m) are finalised as soon as practicable but in any event by no later than one *business day* following the day on which the *spot market* in the *region* ceased to be suspended.
- (o) *NEMMCO* must calculate the average *loss factor* applicable to clause 3.14.5(m) by reference to the *inter-regional loss factor* equations relating to the relevant *regulated interconnector*.

### 3.14.6 Compensation due to the application of an administered price, VoLL or market floor price

- (a) *Scheduled Generators* may claim compensation from NEMMCO in respect of *generating units* if, due to the application of an *administered price cap* during either an *administered price period* or *market suspension*, the resultant *spot price* payable to *dispatched generating units* in any *trading interval* is less than the price specified in their *dispatch offer* for that *trading interval*.
- (a1) A *Scheduled Network Service Provider* may claim compensation from NEMMCO in respect of a *scheduled network service* if, due to the application of an *administered price cap*, *VoLL*, the *market floor price* or an *administered floor price*, the resultant revenue receivable in respect of *dispatched network services* in any *trading interval* is less than the minimum requirement specified by its *network dispatch offer* for that *trading interval*.
- (a2) A *Market Participant* which submitted a *dispatch bid* may claim compensation from NEMMCO in respect of a *scheduled load* if, due to the application of an *administered floor price* during either an *administered price period* or *market suspension*, the resultant *spot price* in any *trading interval* is greater than the price specified in the *dispatch bid* for that *trading interval*.
- (a3) In respect of an *ancillary service generating unit* or an *ancillary service load*, a *Market Participant* may claim compensation from NEMMCO if, due to the application of an *administered price cap*, the resultant *ancillary service price* for that *ancillary service generating unit* or *ancillary service load* in any *dispatch interval* is less than the price specified in the relevant *market ancillary service offer*.
- (b) Notification of an intention to make a claim under paragraphs (a), (a1), (a2) or (a3) must be submitted to both NEMMCO and the AEMC within 5 *business days* of the *trading interval* in which *dispatch prices* were adjusted in accordance with clause 3.9.5 or notification by NEMMCO that an *administered price period* or period of *market suspension* has ended.
- (c) The AEMC must, in accordance with the *transmission consultation procedures*, develop and *publish* guidelines ('compensation guidelines') that:
  - (1) identify the objectives of the payment of compensation under this clause as being to maintain the incentive for:
    - (i) *Scheduled Generators*, *Scheduled Network Service Providers* and other *Market Participants* to invest in *plant* that provides services during peak periods; and
    - (ii) *Market Participants* to supply *energy* and other services during an *administered price period*;
  - (2) require the amount of compensation payable in respect of a claim under this clause to be based on:

- (i) the costs directly incurred by the claimant due to the application of the *administered price cap*, *VoLL*, the *market floor price* or the *administered floor price* (as the case may be); and
    - (ii) the value of any opportunities foregone by the claimant due to the application of the *administered price cap*, *VoLL*, the *market floor price* or the *administered floor price* (as the case may be);
  - (3) 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 the costs referred to in clause 3.14.6(c)(2)(i) and the value of opportunities foregone referred to in clause 3.14.6(c)(2)(ii); and
  - (4) set out the information *NEMMCO* and a claimant must provide to enable a panel established under paragraph (g) to make a recommendation as to compensation under this clause and to enable the *AEMC* to make a determination as to compensation under this clause.
- (d) The *AEMC* must request the *Adviser* to establish a three member panel from the group of persons referred to in clause 8.2.2(e) and such other persons as the *Adviser* may choose to appoint under clause 8.2.6A(i) to assist the *AEMC* to develop the compensation guidelines.
- (e) The *AEMC* must *publish* the first compensation guidelines by 30 June 2009 and there must be such guidelines in place at all times after that date.
- (f) The *AEMC* may from time to time, in accordance with the *transmission consultation procedures*, amend or replace the compensation guidelines.
- (g) Following its receipt of a notification under paragraph (b), the *AEMC* must request the *Adviser* to establish a three member panel from the group of persons referred to in clause 8.2.2(e) and such other persons as the *Adviser* may choose to appoint under clause 8.2.6A(i) to make recommendations to the *AEMC* as to whether:
- (1) compensation should be payable by *NEMMCO* in relation to the claim; and
  - (2) if so, the amount of compensation that should be paid.
- (h) The panel must, as soon as practicable but not later than:
- (1) 30 *business days* after receiving the information required to be provided to it under the compensation guidelines, give to the *AEMC* a report that sets out its draft recommendations as to the matters referred to in paragraph (g); and
  - (2) 20 *business days* after the closing date for submissions on that report, give to the *AEMC* a report that sets out its final recommendations as to the matters referred to in paragraph (g).



- (i) Not later than 20 *business days* after receiving a report referred to in subparagraph (h)(1), the *AEMC* must *publish*:
  - (1) that report;
  - (2) its draft decision as to the matters referred to in paragraph (g); and
  - (3) an invitation for written submissions to be made to the *AEMC* on that report and the *AEMC's* draft decision.
- (j) Any person may make a written submission to the *AEMC* on the report referred to in subparagraph (h)(1) and the *AEMC's* draft decision within the time specified in the invitation referred to in subparagraph (i)(3), which must not be earlier than 20 *business days* after the invitation is *published*.
- (k) In preparing a report that sets out its final recommendations, the panel must take into account the submissions made in response to the invitation referred to in subparagraph (i)(3).
- (l) In preparing a report under paragraph (h), the panel must apply the compensation guidelines.
- (m) In making its draft decision as to the matters referred to in paragraph (g), the *AEMC* must take into account the draft recommendations of the panel.
- (n) Not later than 15 *business days* after receiving a report referred to in subparagraph (h)(2), the *AEMC* must *publish*:
  - (1) that report; and
  - (2) its final decision as to the matters referred to in paragraph (g).
- (o) In making its final decision as to the matters referred to in paragraph (g), the *AEMC* must take into account:
  - (1) the final recommendations of the panel; and
  - (2) the submissions made in response to the invitation referred to in subparagraph (i)(3).
- (p) In making a draft or final decision under this clause, the *AEMC* must apply the compensation guidelines unless it is satisfied that there are compelling reasons not to do so.
- (q) The *AEMC* may recover from a claimant for compensation under this clause any costs that are incurred by the *AEMC* and the panel 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 NEMMCO

(a) *NEMMCO must facilitate the billing and settlement of payments due in respect of transactions under this Chapter 3, including:*

(1) *spot market allocations;*

(2) *reallocation transactions;*

(3) *negative settlements residues under clause 3.6.5; and*

(4) *ancillary services transactions under clause 3.15.6A.*

~~(a) *NEMMCO 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; and*~~

~~(3) *ancillary services transactions under clause 3.15.6A.*~~

(b) *NEMMCO must determine the Participant fees and the Market Participants must pay them to NEMMCO in accordance with the provisions of rule 2.11.*

### 3.15.2 Electronic funds transfer

(a) *NEMMCO 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 NEMMCO, all Market Participants must use the EFT facility provided by NEMMCO 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) NEMMCO 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:

$$\text{AGE} = - \text{AAGE}$$

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:

$$\text{TA} = \text{AGE} \times \text{TLF} \times \text{RRP}$$

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 *intra-regional loss factor* at that *connection point* or *virtual transmission node* respectively, and for any other *connection point*, is the *intra-regional loss factor* at the *transmission network connection point* or *virtual transmission node* to which it is assigned in accordance with clause 3.6.3(a); 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.

- (b) NEMMCO is entitled to the *trading amount* resulting from a NEMMCO *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 *NEMMCO 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:

$$TA = \text{the aggregate of } \frac{EA \times ASP}{(12)} \text{ for each } \textit{dispatch interval} \text{ in a } \textit{trading interval}$$

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 each *trading interval*, in relation to each *Market Participant* which provides *non-market ancillary services* under an *ancillary services agreement*, an ancillary services transaction occurs, which results in a *trading amount* for the relevant *Market Participant* determined in accordance with that agreement.
- (c) 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:

$$TA = TNCASP \times \frac{TCE}{ATCE} \times -1$$

where:

TA (in \$) = the *trading amount* to be determined (which is a negative number);

TNCASP (in \$) = all amounts payable by *NEMMCO* in respect of the *trading interval* under *ancillary services*

*agreements* in respect of the provision of *NCAS*;

TCE (in MWh) = the *customer energy* for the *Market Customer* for the *trading interval*; and

ATCE (in MWh) = the aggregate *customer energy* figures for all *Market Customers* for the *trading interval*.

- (d) In each *trading interval*, in relation to each *Market Generator*, an ancillary services transaction occurs, which results in a *trading amount* for the *Market Generator* determined in accordance with the following formula:

$$TA = \frac{TSRP}{2} \times \frac{TGE}{ATGE} \times -1$$

where:

TA (in \$) = the *trading amount* to be determined (which is a negative number);

TSRP (in \$) = the total of all amounts payable by *NEMMCO* in respect of the *trading interval* under *ancillary services agreements* in respect of the provision of *system restart ancillary services*;

TGE (in MWh) = the *generator energy* for the *Market Generator* for the *trading interval*; and

ATGE (in MWh) = the aggregate of the *generator energy* figures for all *Market Generators* for the *trading interval*.

- (e) In each *trading interval*, in relation to each *Market Customer*, an ancillary services transaction occurs, which results in a *trading amount* determined in accordance with the following formula:

$$TA = \frac{TSRP}{2} \times \frac{TCE}{ATCE} \times -1$$

where:

TA (in \$) = the *trading amount* to be determined (which is a negative number);

TSRP (in \$) = has the meaning given in clause 3.15.6A(d);

TCE (in MWh) = the *customer energy* for the *Market Customer* for the *trading interval*; and

ATCE (in MWh) = the aggregate of the *customer energy* figures for all *Market Customers* for the *trading interval*.

- (f) The total amount calculated by *NEMMCO* 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). *NEMMCO* must:

- (1) allocate for each *region* and for each *dispatch interval* within the relevant *trading interval* the proportion of the total amount calculated by *NEMMCO* 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* 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* in a given *region*, an ancillary services transaction occurs, which results in a *trading amount* for that *Market Generator* determined in accordance with the following formula:

$$TA = RTCRSP \times \frac{TGE}{RATGE} \times -1$$

where:

- |                |   |  |
|----------------|---|--|
| TA (in \$)     | = | the <i>trading amount</i> to be determined (which is a negative number);   |
| RTCRSP (in \$) | = | the total of all amounts calculated by <i>NEMMCO</i> as appropriate to recover from the given <i>region</i> as calculated in this clause 3.15.6A(f) for the <i>fast raise service</i> , <i>slow raise service</i> or <i>delayed raise service</i> in respect of <i>dispatch intervals</i> which fall in the <i>trading</i> |

*interval;*

TGE (in MWh) = the *generator energy* figures for the *Market Generator* in that *region* for the *trading interval*; and

RATGE (in MWh) = the aggregate of the *generator energy* figures for all *Market Generators* in that *region* for the *trading interval*.

- (g) The total amount calculated by *NEMMCO* 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). *NEMMCO* must:
- (1) allocate for each *region* and for each *dispatch interval* within the relevant *trading interval* the proportion of the total amount calculated by *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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* 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* 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 *NEMMCO* 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 *NEMMCO* for the *Market Generator* 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

$$PTA = \text{the aggregate of } \left( TSFCAS \times \frac{MPF}{AMPF} \times \frac{TCE}{ATCE} \right)$$

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 \$) = has the meaning given in subparagraph (1);
- MPF (a number) = the aggregate of the contribution factor set by *NEMMCO* 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 (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*;
- TCE (in MWh) = 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 (in MWh) = 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) *NEMMCO* 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 *region* has or *regions* have operated asynchronously during the relevant *trading interval*, the contribution factors relevant to the allocation of *regulating raise service* or *regulating lower service* to that *region* or *regions*,
- in accordance with the procedure prepared under paragraph (k).
- (k) *NEMMCO* must prepare a procedure for determining contribution factors for use in paragraph (j) and, where *NEMMCO* considers it appropriate, for use in paragraph (nb), taking into account the following principles:
- (1) the contribution factor for a *Market Participant* should reflect the extent to which the *Market Participant* contributed to the need for *regulation services*;
  - (2) the contribution factor for all *Market Customers* that do not have *metering* to allow their individual contribution to the aggregate need for *regulation services* to be assessed must be equal;
  - (3) for the purpose of paragraph (j)(2), the contribution factor determined for a group of *regions* for all *Market Customers* that do not have *metering* to allow the individual contribution of that *Market Customer* to the aggregate need for *regulation services* to be assessed, must be divided between *regions* in proportion to the total *customer energy* for the *regions*;
  - (4) the individual *Market Participant's* contribution to the aggregate need for *regulation services* will be determined over a period of time to be determined by *NEMMCO*;

- (5) a *Registered Participant* which has classified a *scheduled generating unit, scheduled load, ancillary service generating unit* or *ancillary service load* (called a ‘**Scheduled Participant**’) will not be assessed as contributing to the deviation in the *frequency* of the *power system* if within a *dispatch interval*:
- (i) the *Scheduled Participant* achieves its *dispatch* target at a uniform rate;
  - (ii) the *Scheduled Participant* is *enabled* to provide a *market ancillary service* and responds to a control signal from *NEMMCO* to *NEMMCO*’s satisfaction; or
  - (iii) the *Scheduled Participant* is not *enabled* to provide a *market ancillary service*, but responds to a need for *regulation services* in a way which tends to reduce the aggregate deviation;
- (6) where contributions are aggregated for *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 *region* or *regions* is in the same proportion as the total *customer energy* for that *region* or *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 *NEMMCO* to *NEMMCO*’s satisfaction; or
  - (iii) is not *enabled* to provide a *market ancillary service*, but responds to a need for *regulation services*. (l)*NEMMCO* may amend the procedure referred to in clause 3.15.6A(j) from time to time.
  - (m) *NEMMCO* must comply with the *Rules consultation procedures* when making or amending the procedure referred to in clause 3.15.6A(k).
  - (n) *NEMMCO* 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*, *NEMMCO* 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, *NEMMCO* 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*; and

(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*.

(p) When *NEMMCO* dispatches a quantity of *regulating raise service* or *regulating lower service* in addition to the quantity it determines in accordance with the *dispatch algorithm*, *NEMMCO* 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 clause 3.15.7(b), *NEMMCO* 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 3.15.17(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:

DCP = the amount of compensation the *Directed Participant* is entitled to receive;

AMP = the price below which are 90% of the *spot prices* or *market 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

DQ = is either:

- (A) 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) 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 *NEMMCO* issues a *direction*, the *Directed Participant* had submitted a valid *dispatch bid*, *dispatch offer* or *rebid* for *dispatch* of the service that is to be *dispatched* in accordance with the *direction*, 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* as appropriate.
- (e) *NEMMCO* 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, *NEMMCO* 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.
- (b) Subject to clause 3.15.7A(e) and clause 3.15.7A(e1), *NEMMCO* must, in accordance with the *intervention settlement timetable* and any guidelines developed by *NEMMCO* in accordance with the *Rules consultation procedures*, determine if in *NEMMCO*'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 *NEMMCO* 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) *NEMMCO* 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 *NEMMCO* 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*, *NEMMCO* 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) *NEMMCO* 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) *NEMMCO* 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, *NEMMCO* 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), *NEMMCO* 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 3.15.7 or clause 3.15.7A may, in accordance with the *intervention settlement timetable*, make a written submission to *NEMMCO* 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 3.15.7(c) 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 *NEMMCO* determines pursuant to clause 3.15.7A(a) 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 *NEMMCO* claiming compensation from *NEMMCO* 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 *NEMMCO* requesting compensation from *NEMMCO* 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) *NEMMCO* 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 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 *NEMMCO* 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) *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* to *Directed Participants* pursuant to clause 3.15.7(a) in respect of a *direction* for the provision of *energy*; plus
  - (iii) the total amount payable by *NEMMCO* to the independent expert pursuant to clause 3.12.3(c).
- (b) *NEMMCO* must, in accordance with the *intervention settlement timetable*, calculate a figure for each *Market Customer* in each *region* applying the following formula:

$$MCP = \frac{E}{\Sigma E} \times \frac{RB}{\Sigma RB} \times CRA$$

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 *NEMMCO* pursuant to clause 3.15.8(b1) at the time of issuing the *direction*.

CRA is the *compensation recovery amount*.

- (b1) *NEMMCO* 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) *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* pursuant to clause 3.15.8(b), subject to the provisions of clause 3.15.22.

- (e) *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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) *NEMMCO* must use the appropriate formula set out in clause 3.15.6A(c), (d), (e), (f), (g), (h) or (i) depending on which *ancillary service* was the subject of the *direction*;
  - (2) TNCASP, TSRP, TCRSP, TCLSP 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, ATCE or ATGE 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 *NEMMCO* pursuant to clauses 3.12.2 and 3.15.7 not recovered pursuant to clauses 3.15.8(b) and 3.15.8(e) must be recovered from *Registered Participants* in the same proportion as the largest single fixed component of *Participants fees*.

### 3.15.9 Reserve settlements

- (a) *NEMMCO'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) Included in the statements to be provided under clauses 3.15.14 and 3.15.15, *NEMMCO* must give each *Market Participant* a statement setting out:
  - (1) the aggregate of the amounts payable by *NEMMCO* under *reserve contracts* in respect of the relevant *billing period*;
  - (2) any amounts determined as payable by *NEMMCO*:
    - (i) by the independent expert under clause 3.12.3; 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 *NEMMCO* under the *Rules* in respect of *reserve contracts* during the relevant *billing period*.
- (c) Separate statements must be provided under paragraph (b):
  - (1) for *reserve contracts* entered into by *NEMMCO* 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 *NEMMCO* a *region* would otherwise, in *NEMMCO's* reasonable opinion, fail to meet the minimum *power system security and reliability standards*; or
  - (2) a *region* requires a level of *power system reliability* or *reserves* which, in *NEMMCO's* reasonable opinion, exceeds the level required to meet the minimum *power system security and reliability standards*,then *NEMMCO* 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 *NEMMCO*, *NEMMCO* 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:

$$MCP = \frac{E \times RRC}{\Sigma E}$$

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 *NEMMCO* under *reserve contracts* which relate to the *relevant region* in the *billing period* as agreed under clause 3.20.3(f); and

$\Sigma E$  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 *NEMMCO* an amount equal to the sum calculated under paragraph (e) in respect of that *Market Customer*.
- (g) Operational and administrative costs incurred by *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* and each of the *Market Participants* and *Scheduled Generators*.

### 3.15.10 Administered price, VoLL or market floor price compensation payments

- (a) In the event that the *AEMC* awards compensation to a *Scheduled Generator*, *Market Participant* which submitted a *dispatch bid* or *Scheduled Network Service Provider* in accordance with clause 3.14.6, then *NEMMCO* must determine an amount which shall be payable by all *Market Customers* who purchased electricity from the *spot market* in a *region* in which the *regional reference price* was affected by the imposition of an *administered price* or *VoLL*, or *market floor price* in the *trading interval* or *trading intervals* in respect of which such compensation has been awarded.
- (b) *NEMMCO* shall determine the amounts payable for each relevant *trading interval* by each of the affected *Market Customers* under clause 3.15.10(a) as follows:

$$\frac{APC \times E_i}{\Sigma E_i}$$

where

APC is the total amount of any compensation payments awarded by the AEMC to *Scheduled Generators, Market Participants* which submitted *dispatch bids* or *Scheduled Network Service Providers* in respect of that *trading interval* 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 *billing period* and each *connection point* for which the *Market Customer* is *financially responsible* in any *region* or *regions* affected by the imposition of an *administered price* or *VoLL* or *market floor price*.

$\Sigma E_i$  is the sum of all amounts determined as " $E_i$ " in accordance with this clause 3.15.10 for all *Market Customers* in all *regions* affected by the imposition of an *administered price* or *VoLL* or *market floor price* in that *trading interval*.

- (c) Within 15 *business days* of being notified by the AEMC that compensation is to be paid to a *Scheduled Generator, Market Participant* which submitted a *dispatch bid* or *Scheduled Network Service Providers* in accordance with clause 3.14.6, NEMMCO 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 NEMMCO, 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 NEMMCO, the AER or the AEMC under or in connection with the *Rules* on or after 1 July 2000, NEMMCO, 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 *NEMMCO*, 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 *NEMMCO*, 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
  - (3) *NEMMCO* 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*, *NEMMCO*, 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*, *NEMMCO*, 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 *NEMMCO* 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:

$$EMCP = RSA \quad \times \quad \frac{(AGE)}{(AAGE)}$$

Where:

EMCP is the payment to be made by *Market Customers* to *NEMMCO*.

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 *NEMMCO* in accordance with clause 3.12A.7(a); and
- (3) the amounts payable by *NEMMCO* 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, *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* in accordance with clause 3.12A.7(a); and
  - (iii) the amounts payable by *NEMMCO* to the *Scheduled Generators* or *Scheduled Network Service Providers* pursuant to all *accepted restriction offers*.

### 3.15.10C Intervention Settlements

- (a) *NEMMCO* must include in the final statement provided under clause 3.15.14 and 3.15.15 for a *billing period* in which a *direction* was issued:
  - (1) for each *Affected Participant* and *Market Customer* in relation to that *direction* the amount calculated pursuant to clause 3.12.2(c);
  - (2) for each *Directed Participant* in relation to that *direction* 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 that *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 *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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; and
- (4) for each *Market Customer* and *Market Generator* in relation to that *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) TNCASP, TSRP, TCRSP, TCLSP and TSFCAS shall be the total compensation payable by *NEMMCO* 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.
- (b) *NEMMCO* must include in the first statement it provides under clauses 3.15.14 and 3.15.15 following a final determination of all total amounts payable or receivable by it pursuant to clause 3.12.2, clause 3.15.7(a) and clause 3.15.8, 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);
  - (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 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):
    - (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* and *Market Generator* equal to:
    - (i) the amount payable by the *Market Customer* or *Market Generator*, 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) TNCASP, TSRP, TCRSP, TCLSP and TSFCAS shall be the total compensation payable by *NEMMCO* for the relevant *ancillary service* calculated in accordance with clause 3.15.7A(a); less
    - (ii) the amount paid by the *Market Customer* or *Market Generator*, 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 *NEMMCO* a written notice of the court's determination.
- (3) *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* to each relevant *Market Customer* and *Market Generator* 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) TNCASP, TSRP, TCRSP, TCLSP, 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 *NEMMCO*, under which *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* in accordance with the *reallocation procedures* and the timetable for *reallocation requests* as published by *NEMMCO* from time to time (the **reallocation timetable**).
- (e) Upon receipt of a *reallocation request* *NEMMCO* 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*, *NEMMCO* may deregister the *reallocation request* if:
- (1) the *prudential requirements* are not satisfied by either of those *Market Participants*;
  - (2) either of the *Market Participants* fails to comply with any conditions imposed by *NEMMCO* in respect of the *reallocation request* at the time it was registered;
  - (3) both *Market Participants* notify *NEMMCO* 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 *NEMMCO* 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) *NEMMCO* 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) *NEMMCO* 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, *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* may exercise following a *default event*, upon deregistration of a *reallocation request* *NEMMCO* 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) *NEMMCO* must develop and *publish* procedures in accordance with the *Rules consultation procedures*, to enable *Market Participants* to create and record *reallocation 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) *NEMMCO* 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 *NEMMCO* 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) *NEMMCO* is not required to meet its obligations under paragraph (a) in any way which increases *NEMMCO*'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* *NEMMCO* 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) *NEMMCO* 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, *NEMMCO* is prevented from calculating the net *settlement amount* in accordance with clause 3.15.12(a) by factors which are beyond the control of *NEMMCO* and which deprive *NEMMCO* 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 *NEMMCO*.
- (c) *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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*, *NEMMCO* 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 *NEMMCO* calculates an *estimated settlement amount* in accordance with clause 3.15.12(b), *NEMMCO* 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*, NEMMCO must give to each *Market Participant* a *final statement* stating the amounts payable by the *Market Participant* to NEMMCO or receivable by the *Market Participant* from NEMMCO (subject to clause 3.15.22) in respect of the relevant *billing period*.
- (b) Unless NEMMCO 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 NEMMCO

- (a) Subject to clause 3.15.15A(b), if NEMMCO 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 NEMMCO 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
  - (2) within 60 days after it has given a *final statement* to which the *relevant data* relates, then NEMMCO 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 NEMMCO 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.

### 3.15.17 Payment to market participants

Subject to clause 3.15.22 on the *day* on which NEMMCO is to be paid under clause 3.15.16, NEMMCO 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 NEMMCO 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 *NEMMCO* issuing a written notice of dispute in the form prescribed by *NEMMCO*'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 *NEMMCO* 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 *NEMMCO*.

### **3.15.19 Revised Statements and Adjustments**

- (a) Where a dispute about a *final statement* has been either resolved by agreement between *NEMMCO* 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, *NEMMCO* 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 *NEMMCO* under clause 3.15.19(a)(3).
- (b) For each *billing period* *NEMMCO* 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 *NEMMCO'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 *NEMMCO* 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*”), *NEMMCO* 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) *NEMMCO* must develop and publish a policy for *routine* and *special revised statements*. *NEMMCO* may amend the policy at any time. *NEMMCO* 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 *NEMMCO*;
  - (2) the process by which the calendar can be amended or varied by *NEMMCO* and the process by which *Market Participants* are notified of any amendment and variation; and
  - (3) a transitional process by which *NEMMCO* 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.
- (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 any money due for payment by it under the *Rules* by the appointed time on the due date;

- (2) *NEMMCO* does not receive payment in full of any amount claimed by *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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 under the laws of any relevant jurisdiction is appointed in respect of the *Market Participant* or a *credit support provider* which has provided *credit support* for that *Market Participant*, or any action is taken to appoint any such person;
- (12) an application or order is made for the winding up or dissolution or a resolution is passed or any steps are taken to pass a resolution for the winding up or dissolution of the *Market Participant* or a *credit support provider* which has provided *credit support* for that *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*, *NEMMCO* 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 *NEMMCO* determines represents the amount of any money actually or contingently owing by the *Market Participant* to *NEMMCO* pursuant to the *Rules*.
- (c) If the *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 *NEMMCO*, or if *NEMMCO* receives notice from the *defaulting Market Participant* that it is not likely to remedy the default, then *NEMMCO* may issue a "*suspension notice*" under which *NEMMCO* notifies the *defaulting Market Participant* of the date and time from which it is suspended from trading, and the extent of that suspension.
- (d) At the time of issue of a *suspension notice*, or as immediately thereafter as is practicable, *NEMMCO* 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) *NEMMCO* must lift a *suspension notice* if the *default event* is remedied and there are no other circumstances in existence which would entitle *NEMMCO* to issue a *suspension notice*.
- (f) *NEMMCO* 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. *NEMMCO* must issue a public notice promptly after a *suspension notice* is lifted.
- (g) From the time of suspension that *NEMMCO* 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 *NEMMCO* 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*.
- (i) Following the issue of a *suspension notice*, *NEMMCO* 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*.

- (j) Unless provided with instructions from the relevant *participating jurisdiction* or *participating jurisdictions* that a nominated third party is to assume financial responsibility for a suspended *Market Participant's* obligations under the *Rules* and that person does so, then, following the issue of a *suspension notice*, *NEMMCO* must request the *AER* to seek, and the *AER* must then seek, an order from a court to physically *disconnect market loads* for which the *defaulting Market Participant* is *financially responsible*.

### **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 *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* in accordance with the procedure established under clause 3.6.5.

- (b) The maximum amount which *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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<sub>1</sub> 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<sub>1</sub> 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<sub>1</sub> is the shortfall or surplus payable by or due to the *Market Participant* in respect of the *financial year*;

SAP<sub>1</sub> 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<sub>1</sub> 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) *NEMMCO* must issue a statement stating the  $SS_1$  amount payable to or receivable by the *Market Participant* in respect of this clause 3.15.23. If  $SS_1$  is positive, such that an amount is payable by *NEMMCO* it will credit the sum to the *Market Participant's* account in the next *billing period*. If  $SS_1$  is negative, such that an amount is payable by a *Market Participant*, *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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 *NEMMCO*.
- (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 *NEMMCO* must pay interest on any unpaid moneys due and payable by it under this Chapter.
- (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) *NEMMCO* 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) *NEMMCO* must pay to the *Participant compensation fund* that component of *Participant fees* under rule 2.11 attributable to the *Participant compensation fund*.
- (c) The funding requirement for the *Participant compensation fund* for each *financial year* is the lesser of:
  - (1) \$1,000,000; and
  - (2) \$5,000,000 minus the amount which *NEMMCO* reasonably estimates will be the balance of the *Participant compensation fund* at the end of the relevant *financial year*.
- (d) The *Participant compensation fund* is to be maintained by *NEMMCO* and is the property of *NEMMCO*.
- (e) Any interest paid on money held in the *Participant compensation fund* will accrue to and form part of the *Participant compensation fund*.
- (f) *NEMMCO* must pay from the *Participant compensation fund* all income tax on interest earned by the *Participant compensation fund* and must pay from the *Participant compensation fund* all bank account debit tax, financial institutions duty and bank fees in relation to the *Participant compensation fund*.
- (g) Upon ceasing to be a *Scheduled Generator* or a *Semi-Scheduled Generator*, the relevant *Generator* is not entitled to a refund of any contributions made to the *Participant compensation fund*.
- (h) Upon ceasing to be a *Scheduled Network Service Provider*, a *Scheduled Network Service Provider* is not entitled to a refund of any contributions made to the *Participant compensation fund*.

### **3.16.2 Dispute resolution panel to determine compensation**

- (a) Where a *scheduling error* occurs, a *Market Participant* may apply to the *dispute resolution panel* for a determination as to compensation under this clause 3.16.2.
- (b) Where a *scheduling error* occurs, the *dispute resolution panel* may determine that compensation is payable to *Market Participants* and the amount of any such compensation payable from the *Participant compensation fund*.
- (c) A determination by the *dispute resolution panel* as to compensation must be consistent with this clause 3.16.2.
- (d) A *Scheduled Generator* or *Semi-Scheduled Generator* who receives an instruction in respect of a *scheduled generating unit* or *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 *scheduling error* not occurred, will be entitled to receive in compensation an amount determined by the *dispute resolution panel*.

- (e) A *Scheduled Network Service Provider* who receives an instruction in respect of its *scheduled network services* to transfer less power on the *scheduled 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, *NEMMCO* 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 NEMMCO Software**

#### **3.17.1 Acceptance of software**

*NEMMCO* must not alter, reconfigure, reprogram or otherwise modify or enhance any computer software required under this Chapter 3 for the operation of the *market* unless such changes have been duly authorised by the *AER*.

#### **3.17.2 No liability**

To the maximum extent permitted by law, no Contractor, and no employee, officer or agent of *NEMMCO* or a Contractor, is liable (in contract, tort including negligence or otherwise) for any loss or damage suffered or incurred by a *Market Participant* or any other person as a consequence of the use of any computer software to operate the *market*. For the purpose of this clause, "Contractor" means any person or organisation engaged by *NEMMCO* to assist in the development, design, installation, maintenance or upgrading of the computer software used to operate the *market*.

### **3.18 Settlement Residue Auctions**

#### **3.18.1 Settlement residue concepts**

- (a) An "*auction participation agreement*" is an agreement between *NEMMCO* and an *eligible person* concerning the participation by the *eligible person* in *auctions*.
- (b) A "*settlement residue distribution agreement*" or "*SRD agreement*" is an agreement between *NEMMCO* and an *eligible person* entered into following an *auction* under which:
  - (1) *NEMMCO* agrees to distribute to the *eligible person* a portion of the *settlements residues* allocated to a *directional interconnector* for a period specified in the *SRD agreement*; and
  - (2) the *eligible person* agrees to pay *NEMMCO* a certain amount for the right referred to in clause 3.18.1(b)(1).
- (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 clause 3.18.1(c)(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, *NEMMCO* 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 make payments under *SRD*

*agreements* in relation to that *directional interconnector* and to 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), *NEMMCO* 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) *NEMMCO* may conduct *auctions* to determine which *eligible persons* will enter into *SRD agreements* with *NEMMCO*.
- (b) *NEMMCO* may only enter into *SRD agreements* with persons (called "*eligible persons*") which satisfy 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 clause 3.18.2(g).
- (c) *Auctions* must be conducted in accordance with the *auction rules*.
- (d) *NEMMCO* 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 *NEMMCO* 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) *NEMMCO* may, after complying with the *Rules consultation procedures*, cease conducting *auctions*.
- (f) If *NEMMCO* takes any action under clause 3.18.2(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 *NEMMCO* may enter into *SRD agreements* must 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 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 *NEMMCO* considers is acting on behalf of or in concert with a person described in clauses 3.18.2(g)(1)-(2);
  - (5a) any person who *NEMMCO* considers is acting on behalf of or in concert with a person described in clause 3.18.2(g)(4); or
  - (6) any person who would be a “retail client” as defined in section 761G (7) of the Corporations Act 2001 (Cth), if they entered into an *SRD agreement* with *NEMMCO*.
- (h) **[Deleted]**

### 3.18.3 Auction rules

- (a) *NEMMCO* 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 *NEMMCO* in a form satisfactory to *NEMMCO*);
  - (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 clause 3.18.3(a)(1).
- (b) In developing and amending the *auction rules*, *NEMMCO* 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 unit of the *settlements residue* in respect of a *directional interconnector* will be the same for all *SRD agreements* resulting from 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) *NEMMCO* must make the *auction rules* available to *Registered Participants* and to any other person who requests a copy.
- (d) *NEMMCO* may amend the *auction rules* at any time with the approval of the *settlement residue committee*.
- (e) Subject to clause 3.18.3(f), in developing and amending the *auction rules*, *NEMMCO* must comply with the *Rules consultation procedures*.
- (f) *NEMMCO* need not, provided it has consulted to the extent practicable in the circumstances, comply with the *Rules consultation procedures* in relation to a proposed amendment to the *auction rules* if:
  - (1) the amendment has the support of at least three-quarters of the members of the *settlement residue committee*; and
  - (2) *NEMMCO* considers the amendment is urgent.

#### **3.18.4 Proceeds and fees**

- (a) *NEMMCO* must distribute:
  - (1) subject to clauses 3.6.5(a)(4) and (4A), proceeds from each auction in respect of a *directional interconnector*; and
  - ~~(1) subject to clause 3.6.5(a)(4A) and (4B), proceeds from each auction in respect of a *directional interconnector*; and~~
  - (2) subject to clauses 3.18.4(b) and (c), any portion of the *settlements residue* allocated to the *directional interconnector* which is not the subject of a *SRD agreement*,  
  
to the appropriate *Network Service Providers* in accordance with the principles referred to in clause 3.6.5 in relation to the allocation and distribution of *settlements residue* attributable to *regulated interconnectors*.
- (b) The costs and expenses incurred by *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* must pay *auction amounts* in accordance with the *auction rules*, and, for the avoidance of doubt, amounts payable by *eligible persons* to *NEMMCO* under *SRD agreements* will not be regarded as amounts payable under the *Rules* for the purposes of rule 3.15.
- (f) *NEMMCO* 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 *NEMMCO* must use that facility for paying and receiving *auction amounts*.

### 3.18.5 Settlement residue committee

- (a) *NEMMCO* must establish a settlement residue committee.
- (b) The functions of the *settlement residue committee* are to:
  - (1) approve any suspension, or removal of a suspension, imposed by *NEMMCO* on the conducting of *auctions*;
  - (2) approve proposed amendments to the *auction rules* developed by *NEMMCO*;
  - (3) monitor, review and report on the *auctions* conducted by *NEMMCO* under this rule 3.18; and
  - (4) approve the costs and expenses incurred by *NEMMCO* 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 *NEMMCO* appointed by *NEMMCO*, 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 end use customers of electricity.
- (d) *NEMMCO* 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 *NEMMCO* after consultation with the class of *Registered Participants* the person is to represent, and *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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 *NEMMCO*.

### **3.19 Market Management Systems Access Procedures**

- (a) *NEMMCO* 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* and *Metering Providers* can use the *market management systems*.
- (b) *NEMMCO* 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 *NEMMCO*.

- (c) *NEMMCO* and all *Registered Participants* and *Metering Providers* must comply with the *Market Management Systems Access Procedures*.
- (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*, *NEMMCO* must:
  - (1) notify that *Registered Participant* describing the nature of the breach; and
  - (2) at a time following notification of the breach by *NEMMCO* under clause 3.19(e)(1) determined by *NEMMCO* 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 Expiry of reserve and emergency reliability trader**

This rule 3.20 expires on the earlier of:

- (a) 30 June 2012; or
- (b) a date determined by the *AEMC* on the advice of the *Reliability Panel* in accordance with clause 3.20.9.

#### **3.20.2 Reliability and emergency reserve trader**

- (a) *NEMMCO* must take all reasonable actions to ensure reliability of *supply* 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) *NEMMCO* must have regard to the following principles ('RERT principles') in exercising the RERT under paragraph (a):
  - (1) actions taken should be those which *NEMMCO* 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*, *NEMMCO* must have regard where relevant to the *RERT guidelines*.

### 3.20.3 Reserve contracts

- (a) *NEMMCO* 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) *NEMMCO* may determine to enter into *reserve contracts* to ensure that the reliability of *supply* in a *region* or *regions* meets the relevant *power system security and reliability standards* established by the *Reliability Panel* for the *region*.
- (c) *NEMMCO* must consult with persons nominated by the relevant *participating jurisdictions* in relation to any determination to enter into contracts under paragraph (b).
- (d) *NEMMCO* must not enter into, or renegotiate, a *reserve contract* more than nine months prior to the date that *NEMMCO* reasonably expects that the *reserve* under that contract may be required to ensure reliability of *supply*.
- (e) Subject to paragraph (d), *NEMMCO* may :
  - (1) enter into *reserve contracts*; or
  - (2) renegotiate existing *reserve contracts*,in addition to the contracts already entered into by *NEMMCO* under this rule 3.20.
- (f) In entering into *reserve contracts* under paragraph (b) *NEMMCO* 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 *NEMMCO* determines that it is necessary to commence contract negotiations for the provision of additional *reserves*, *NEMMCO* must *publish* a notice of its intention to do so.

- (h) When contracting for the provision of *scheduled reserves* under *scheduled reserve contracts*, NEMMCO 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 NEMMCO 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 NEMMCO seeks to enter into a *reserve contract* with a *Registered Participant* then the *Registered Participant* must *negotiate* with NEMMCO in good faith as to the terms and conditions of the contract.
- (j) NEMMCO 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 NEMMCO relates except in accordance with the contract.

#### **3.20.4 Dispatch pricing methodology for unscheduled reserve contracts**

- (a) Subject to paragraph (c), NEMMCO 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) NEMMCO may develop and *publish* the methodology developed in accordance with this clause 3.20.4 as part of the methodology NEMMCO is required to develop under clause 3.9.3(e).
- (c) NEMMCO 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 NEMMCO's risk management and accounts relating to the reliability safety net**

- (a) NEMMCO may enter into insurance arrangements with an insurance provider with a view to minimising potential financial losses in respect of NEMMCO's *RERT* activities described in this rule 3.20.
- (b) NEMMCO must ensure that it maintains in its books separate accounts relating to the *RERT* functions and powers granted to NEMMCO under this rule 3.20.

#### **3.20.6 Reporting on RERT by NEMMCO**

- (a) If a *scheduled generating unit*, *scheduled network service* or *scheduled load* under a *scheduled reserve contract* with NEMMCO is *dispatched* or *generating units* or *loads* are *activated* under an *unscheduled reserve contract*, then NEMMCO 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 *NEMMCO* to *dispatch* the *scheduled reserves* or *activate* the *unscheduled reserves*,

and if applicable:

- (5) reasons why *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* 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, *NEMMCO* 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 *NEMMCO*, in each *region*.
- (c) Within 30 *days* of the end of each *financial year* in which *NEMMCO* has exercised the *RERT*, *NEMMCO* 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 NEMMCO's exercise of the RERT

- (a) Notwithstanding clauses 4.8.5A and 4.8.5B, if *NEMMCO* 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, *NEMMCO* may *dispatch* such *scheduled reserves* or *activate* such *unscheduled reserves*.

- (b) *NEMMCO* 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), *NEMMCO* 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* *NEMMCO* 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 revenue contract* or the *activation* of *generating units* or *loads* the subject of an *unscheduled reserve contract*.
- (e) *NEMMCO* 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 *NEMMCO*.
- (f) When exercising the *RERT* under this rule 3.20, *NEMMCO* must take into account the *RERT guidelines*.
- (g) *NEMMCO* must *publish* the first procedures referred to in paragraph (e) by 30 June 2009.

### **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 *NEMMCO* 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 *NEMMCO* 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 *NEMMCO* should undertake in contracting for *reserves* including the process for tendering for contracts for such *reserves*;
  - (5) any specific or additional assumptions about key parameters that *NEMMCO* must take into account in assessing the cost effectiveness of exercising the *RERT*;
  - (6) matters relevant to *NEMMCO* managing a portfolio of *reserve contracts*; and
  - (7) additional forecasts that *NEMMCO* 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 Review of reserve and emergency reliability trader

- (a) The Reliability Panel must, no later than one year prior to the date the RERT is due to expire under clause 3.20.1, complete a review of the RERT ('RERT review') to determine:
- (1) whether the *RERT* should expire on the date specified in clause 3.20.1(a); or
  - (2) whether the *RERT* should expire prior to the date referred to in subparagraph (1) and, if so, that date;
- (b) The *Reliability Panel* must conduct the RERT review in accordance with clauses 8.8.3(d) – (l).
- (c) The *Reliability Panel* may conduct the review referred to in paragraph (a) as part of the review conducted by the *Reliability Panel* under clause 8.8.3(b).
- (d) On receipt of the written report from the RERT review in accordance with clause 8.8.3(j), the *AEMC* may, taking into account the report, make a determination that the *RERT* is to expire and specify the date of expiry.
- (e) The *AEMC* must *publish* the determination referred to in paragraph (d).



### Schedule 3.1 - Registered Bid and Offer Data

- (a) The *registered bid and offer 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 NEMMCO of their *registered bid and offer 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 *registered bid and offer data* annually in accordance with the *timetable* advised by NEMMCO and provide details of any *changes* to NEMMCO.
- (d) *Registered bid and offer data* may be updated by a *Scheduled Generator, Semi-Scheduled Generator* or *Market Participant* at any time but may be subject to audit at NEMMCO's request.
- (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) *Registered bid and offer data* may include tolerance levels.

### Scheduled Generating Unit Data:

Data	Units of Measurement
<b><i>Power station information:</i></b>	
node number/identifier	
total station registered capacity	MW
total station <i>sent out generation</i> at registered capacity	MW
daily <i>energy constraint</i> , if applicable	MWh per day
<b><i>Generating unit information:</i></b>	
full <i>load</i>	MW ( <i>generated and sent out</i> )
normal or technical minimum <i>load</i>	MW ( <i>generated and sent out</i> )
additional emergency <i>generation</i> above registered capacity	MW
<i>maximum ramp rate</i>	MW/minute

response time to full <i>load</i> from cold standby	minutes
aggregation data	
capability chart	
notice to <i>synchronise</i>	minutes
minimum shutdown time	minutes
maximum shutdowns per day	

### Semi-Scheduled Generating Unit Data:

Data	Units of Measurement
<b><i>Power station information:</i></b>	
node number/identifier	
total registered capacity	MW
<b><i>Generating unit information</i></b>	
capacity	MW
<i>maximum ramp rate</i>	MW/minute
aggregation data	

### Scheduled Load Data:

Data	Units of Measurement
node number/identifier	
<i>normally on or normally off</i>	
<i>maximum load</i>	MW
daily <i>energy constraint</i> , if applicable	MWh per day
<i>maximum ramp rate</i>	MW/minute
aggregation data	

### Scheduled Network Service Data:

Data	Units of Measurement
node number/identifier for <i>connection points A and B</i>	
registered <i>power transfer capability</i> to node 1 (may be seasonal etc)	MW
registered <i>power transfer capability</i> to node 2 (may be seasonal etc)	MW
additional transient <i>power transfer capability</i> in each direction	MW

<i>maximum ramp rates</i> for transfer (if applicable)	MW/minute
loss vs flow as piecewise linear relationships for each direction which, taken together, are convex over the entire range of <i>power transfer capabilities</i> in both directions	
aggregation data	

**Dispatch Inflexibility Profile:**

Data	Units of Measurement
time for response from receipt of <i>dispatch</i> instruction from zero <i>load</i> , T1 (see clause 3.8.19(e)(1))	minutes
time after T1 required to reach minimum <i>loading level</i> , T2 (see clause 3.8.19(e)(2))	minutes
time after T2 for which <i>plant</i> must operate at or above the minimum <i>loading level</i> , T3 (see clause 3.8.19(e)(3))	minutes
time required by <i>plant</i> to reduce from its minimum <i>loading level</i> to zero, T4 (see clause 3.8.19(e)(4))	minutes
minimum <i>loading level</i> (see clauses 3.8.19(e)(2), (3), (4))	MW

**Aggregation Data:**

Where *dispatch bids* or *dispatch offers* are submitted for aggregated *generating units*, *market network services* or *loads* then, unless otherwise exempted by NEMMCO, each *Scheduled Generator*, *Semi-Scheduled Generator* and *Market Participant* must provide the information required in accordance with this schedule 3.1 for each *generating unit*, *market network service* or *load* included in those *dispatch bids* or *dispatch offers* both separately and in aggregated form.

*Semi-scheduled generating units* which together are taken to be one *semi-scheduled generating unit* under clause 2.2.7(k) must provide the information required in accordance with this schedule 3.1 for each *generating unit* both separately and in aggregate.

**Schedule 3.2 - [Deleted]**

**Schedule 3.3 - Principles for Determination of Maximum Credit Limits & Prudential Margins**

This schedule sets out the principles to be followed by NEMMCO in determining the *maximum credit limit* and *prudential margin* for a *Market Participant*.

### S3.3.1 Principles for determining maximum credit limits

- (a) The *maximum credit limit* should be set on the principle of imposing a guarantee of payment being made to *NEMMCO* to a level of a *reasonable worst case*.
- (b) When calculating the *maximum credit limit* *NEMMCO* should have regard to:
  - (1) impartial objectivity rather than subjectivity, though it is recognised that some key parameters will need to be subjectively estimated from a limited amount of data - the estimation should be as impartial as possible;
  - (2) the average level and volatility of the *regional reference price* for the *region* for which the *maximum credit limit* is being calculated, measured over a period of time comparable to the frequency of breaches of the *maximum credit limit*;
  - (3) the pattern of the quantity of electricity recorded in the *metering data* for the *Market Participant*;
  - (4) the quantity and pattern of the *prospective reallocation* in the immediate future;
  - (5) the correlation between the metered amounts of electricity and the *regional reference price*;
  - (6) the length of the *credit period*, which is the number of days from the start of a *billing period* to the end of the *reaction period* taking into account:
    - (i) the length of the *billing period*;
    - (ii) the typical time from the end of the *billing period* to the day on which *settlement* for that *billing period* is due to be paid (the *payment period*);
    - (iii) any current written request from the *Market Participant* to *NEMMCO* for the *maximum credit limit* to be determined on a *payment period* taken, for the purposes of clause 3.3.8 and not otherwise, to be 14 days; and
    - (iv) the time from a *default event* to the suspension or other removal of the *defaulting Market Participant* from the *market*, being a period of up to 7 days (the *reaction period*);
  - (7) the statistical distribution of accrued amounts that may be owed to *NEMMCO*; and
  - (8) the degree of confidence that the *maximum credit limit* will be large enough to meet large defaults (i.e. the degree of reasonableness in a *reasonable worst case*).
- (c) As far as practicable, this schedule 3.3 must be read and construed as taking into account *market ancillary service transactions* for the calculation of the *maximum credit limit* for the relevant *Market Participant*.

### **S3.3.2 Principles for determining prudential margins**

The value of the *prudential margin* for a *Market Participant* is set on the same principles as the *maximum credit limit* except that:

- (1) if the aggregate of all *trading amounts* for the *Market Participant* is a positive amount the quantity and pattern of those *trading amounts* are not taken into account when determining the *prudential margin*;
- (2) if the aggregate of all *reallocation amounts* for the *Market Participant* is a positive amount the quantity and pattern of those *reallocation amounts* are not taken into account when determining the *prudential margin*; and
- (3) the *prudential margin* is calculated in respect of the *reaction period*



**CHAPTER 10**



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## 10. GLOSSARY

### AARR

The *aggregate annual revenue requirement for prescribed transmission services*.

### abnormal conditions

A condition described in clause 4.2.3A(a).

### above-standard system shared transmission service

A *shared transmission service* that exceeds the requirements referred to in paragraph (a)(1) or (2) of the definition of *negotiated transmission service* principally as a consequence of investments that have *system-wide benefits*.

### ACCC

Australian Competition and Consumer Commission as established under the Trade Practices Act 1974 (Cth).

### acceptable credit criteria

The credit criteria defined in clause 3.3.3.

### acceptable credit rating

The credit rating determined by *NEMMCO* under clause 3.3.4.

### accepted restriction offer

A *restriction offer* accepted by *NEMMCO* in accordance with the *restriction offer procedures*.

### access charge

For a *Transmission Network Service Provider* - an amount described in clause 5.4A(g)-(j).

For a *Distribution Network Service Provider* - in respect of access to:

- (a) *negotiated distribution services* which would have been *negotiated distribution services* regardless of the operation of clause 6.24.2(c), an amount described in clause 5.5(f)(4); and
- (b) *negotiated distribution services* which would have been treated as *negotiated transmission services* were it not for the operation of clause 6.24.2(c), an amount described in clause 5.4A(g)-(j).



**access standard**

Either an *automatic access standard* or a *negotiated access standard* for a particular technical requirement as recorded in a *connection agreement*.

**Accredited Service Provider category**

A category of registration of a *Metering Provider* established by NEMMCO under S7.4.2(b) as a consequence of requirements of a *participating jurisdiction* to install *metering installations*.

**accumulated energy data**

The data that results from the measurement of the flow of electricity in a power conductor where the data represents a period in excess of a *trading interval*. The measurement is carried out at a *metering point*.

**activate, activated, activation**

The operation of a *generating unit* (other than a *scheduled generating unit*) at an increased *loading level* or reduction in demand (other than a *scheduled load*) undertaken in response to a request by NEMMCO in accordance with an *unscheduled reserve contract*.

**active energy**

A measure of electrical energy flow, being the time integral of the product of *voltage* and the in-phase component of current flow across a *connection point*, expressed in watthour (Wh).

**active power**

The rate at which *active energy* is transferred.

**active power capability**

The maximum rate at which *active energy* may be transferred from a *generating unit* to a *connection point* as specified or proposed to be specified in a *connection agreement* (as the case may be).

**additional intervention claim**

Has the meaning given in clause 3.12.2(k).

**adequately damped**

In relation to a *control system*, when tested with a step change of a feedback input or corresponding reference, or otherwise observed, any oscillatory response at a *frequency* of:

- (a) 0.05 Hz or less, has a damping ratio of at least 0.4;

- (b) between 0.05 Hz and 0.6 Hz, has a halving time of 5 seconds or less (equivalent to a damping coefficient  $-0.14$  nepers per second or less); and
- (c) 0.6 Hz or more, has a damping ratio of at least 0.05 in relation to a *minimum access standard* and a damping ratio of at least 0.1 otherwise.

**ADJR Act**

The Administrative Decisions (Judicial Review) Act 1977 (Cth).

**adjusted gross energy**

The *energy* adjusted in accordance with clause 3.15.5 (for a *transmission network connection point*) or clause 3.15.5A (for a *virtual transmission node*) or clause 3.15.4 (for any other *connection point*).

**administered floor price**

A price floor to apply to a *regional reference price*, with the levels of the price floor being administered under clause 3.14.1 and the circumstances under which it can be invoked by *NEMMCO* being determined as set out in clause 3.14.2.

**administered price cap**

A price cap to apply to a *dispatch price*, *regional reference price* or *ancillary service price*, with the levels of the price cap being set in accordance with clause 3.14.1 and the circumstances under which it can be invoked by *NEMMCO* being determined as set out in clause 3.14.2.

**administered price period**

A period declared by *NEMMCO*, in accordance with clause 3.14.2, in which an *administered price cap* may be invoked.

**Adviser**

The Dispute Resolution Adviser specified in clause 8.2.2(a).

**Adviser referral notice**

A notice referring a dispute to the *Adviser* for the purposes of clause 8.2.5.

**AEMC**

The Australian Energy Market Commission, which is established under section 5 of the Australian Energy Market Commission Establishment Act 2004 (SA).

**AER**

The Australian Energy Regulator, which is established by section 44AE of the Trade Practices Act 1974 (Cth).

### **affected participant's adjustment claim**

Has the meaning given in clause 3.12.2(g)(3).

### **Affected Participant**

- (a) In respect of a particular *direction* in an *intervention price trading interval*:
  - (1) a *Scheduled Generator* or *Scheduled Network Service Provider*:
    - (i) which was not the subject of the *direction*, that had its *dispatched* quantity affected by that *direction*; or
    - (ii) which was the subject of the *direction*, that had its *dispatched* quantity for other *generating units* or other services which were not the subject of that *direction* affected by that *direction*, however, the *Scheduled Generator* or *Scheduled Network Service Provider* is only an *Affected Participant* in respect of those *generating units* and services which were not the subject of that *direction*; or
  - (2) an *eligible person* entitled to receive an amount from *NEMMCO* pursuant to clause 3.18.1(b)(1) where there has been a change in flow of a *directional interconnector*, for which the *eligible person* holds units for the *intervention price trading interval*, as a result of the *direction*; and
- (b) in relation to the exercise of the *RERT* under rule 3.20:
  - (1) a *Scheduled Generator* or *Scheduled Network Service Provider*:
    - (i) whose *plant* or *scheduled network service* was not *dispatched* under a *scheduled reserve contract*, that had its *dispatched* quantity affected by the *dispatch* of *plant* or *scheduled network service* under that *scheduled reserve contract*; and
    - (ii) who was not the subject of *activation* under an *unscheduled reserve contract*, that had its *dispatched* quantity affected by the *activation* of *generating units* or *loads* under that *unscheduled reserve contract*;
  - (2) a *Scheduled Generator* or *Scheduled Network Service Provider* whose *plant* or *scheduled network service* was *dispatched* under a *scheduled reserve contract*, that had its *dispatched* quantity for other *generating units* or other services which were not *dispatched* under the *scheduled reserve contract* affected by that *dispatch* of *plant* or *scheduled network service* under that *scheduled reserve contract*, however, the *Scheduled Generator* or *Scheduled Network Service Provider* is only an *Affected Participant* in respect of those *generating units* and services which were not *dispatched* under that *scheduled reserve contract*; or

- (3) an *eligible person* entitled to receive an amount from *NEMMCO* pursuant to clause 3.18.1(b)(1) where there has been a change in flow of a *directional interconnector*, for which the *eligible person* holds units for the *intervention price trading interval*, as a result of the *dispatch* of plant or *scheduled network service* under a *scheduled reserve contract* or the *activation* of *generating units* or *loads* under an *unscheduled reserve contract*.

**agency data collection system**

The system used by the operator of an *agency metering database* to collect, process and transfer the *metering data* from a *meter* to the *NEMMCO settlements* process.

**agency metering database**

A *metering database* which is operated under a service level agreement with *NEMMCO*.

**aggregate annual revenue requirement**

For *prescribed transmission services*, the meaning in clause 6A.22.1 and for any other service, the calculated total annual revenue to be earned by an entity for a defined class or classes of service.

**aggregate payment due**

The aggregate of the net amounts payable by *NEMMCO* 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 a *billing period* determined in accordance with clause 3.15.22(c).

**agreed capability**

In relation to a *connection point*, the capability to receive or send out power for that *connection point* determined in accordance with the relevant *connection agreement*.

**alternative control service**

A *distribution service* that is a *direct control service* but not a *standard control service*.

**alternative network constraint formulation**

A *network constraint* equation formulation used by *NEMMCO* other than a *fully co-optimised network constraint formulation*.

**Amending Rule**

A Rule made by the *AEMC* under section 103 of the *National Electricity Law* on and from the date of commencement of the operation of that Rule, or parts of that Rule.

**ancillary service fees**

The fees determined by *NEMMCO* under Chapter 2 in relation to *ancillary services*.

**ancillary service generating unit**

A *generating unit* which has been classified in accordance with Chapter 2 as an *ancillary service generating unit*.

**ancillary service load**

A *market load* which has been classified in accordance with Chapter 2 as an *ancillary service load*.

**ancillary service price**

In respect of a *dispatch interval*, for a *market ancillary service*, the common clearing price for the *market ancillary service* determined in accordance with clause 3.9.

**Ancillary Service Provider**

A person who engages in the activity of owning, controlling or operating a *generating unit* or *market load* classified in accordance with Chapter 2 as an *ancillary service generating unit* or *ancillary service load*, as the case may be.

**ancillary services**

*Market ancillary services* and *non-market ancillary services*.

**ancillary services agreement**

An agreement under which a *Registered Participant* agrees to provide one or more *non-market ancillary services* to *NEMMCO*.

**annual building block revenue requirement**

The amount representing the revenue requirement of a *Transmission Network Service Provider* for each *regulatory year* of a *regulatory control period* calculated in accordance with clause 6A.5.4.

**annual national transmission review or ANTS review**

The review conducted by *NEMMCO* in accordance with clause 5.6.5.

**Annual National Transmission Statement or ANTS**

The statement *published* by *NEMMCO* in accordance with clause 5.6.5.

**Annual Planning Report**

A report prepared by a *Transmission Network Service Provider* under clause 5.6.2A(a).

**annual revenue requirement**

An amount representing revenue for a *Distribution Network Service Provider*, for each *regulatory year* of a *regulatory control period*, calculated in accordance with Part C of Chapter 6.

**annual service revenue requirement**

Has the meaning set out in clause 6A.22.2.

**apparent power**

The square root of the sum of the squares of the *active power* and the *reactive power*.

**applicable regulatory instruments**

All laws, regulations, orders, licences, codes, determinations and other regulatory instruments (other than the *Rules*) which apply to *Registered Participants* from time to time, including those applicable in each *participating jurisdiction* as listed below, to the extent that they regulate or contain terms and conditions relating to access to a *network*, *connection to a network*, the provision of *network services*, *network service price* or *augmentation of a network*.

- (1) New South Wales:
  - (a) the Electricity Supply Act 1995 ("ES Act");
  - (b) all regulations made and licences ("Licences") issued under the ES Act;
  - (c) the Independent Pricing and Regulatory Tribunal Act 1992 ("IPART Act");
  - (d) all regulations and determinations made under the IPART Act;
  - (e) all regulatory instruments applicable under the Licences; and
  - (f) the Commercial Arbitration Act 1984.
- (2) Victoria:
  - (a) the Electricity Industry Act 2000 ("EI Act");
  - (b) all regulations made and licences ("Licences") issued under the EI Act;
  - (c) the Essential Services Commission Act 2001 ("ESCV Act");
  - (d) all regulations and determinations made under the ESCV Act;
  - (e) all regulatory instruments applicable under the Licences; and
  - (f) the Tariff Order made under section 158A(1) of the Electricity Industry Act 1993 and continued in effect by clause 6(1) of Schedule 4 to the Electricity Industry (Residual Provisions) Act 1993, as amended or varied in accordance with section 14 of the EI Act.
- (3) South Australia:
  - (a) the Electricity Act 1996;

- (b) all regulations made and licences ("Licences") issued under the Electricity Act;
  - (c) the Essential Services Commission Act 2002 ("ESCSA Act");
  - (d) all regulations and determinations made under the ESCSA Act;
  - (e) all regulatory instruments applicable under the Licences; and
  - (f) the Electricity Pricing Order made under section 35B of the Electricity Act.
- (4) Australian Capital Territory:
- (a) the Utilities Act 2000;
  - (b) all regulations made and licences ("Licences") issued under the Utilities Act;
  - (c) the Independent Competition and Regulatory Commission Act 1997 ("ICRC Act");
  - (d) all regulations and determinations made under the ICRC Act; and
  - (e) all regulatory instruments applicable under the Licences.
- (5) Queensland:
- (a) the Electricity Act 1994;
  - (b) all regulations made and authorities and special approvals ("Licences") granted under the Electricity Act;
  - (c) the Queensland Competition Authority Act 1997 ("QCA Act");
  - (d) all regulations and determinations made under the QCA Act;
  - (e) all regulatory instruments applicable under the Licences; and
  - (f) the Gladstone Power Station Agreement Act 1993 and associated agreements.
- (6) Tasmania:
- (a) the Electricity Supply Industry Act 1995;
  - (b) all regulations made and licences ("Licences") issued under the Electricity Supply Industry Act;
  - (c) all regulatory instruments under the Electricity Supply Industry Act or the Licences (including, without limitation, determinations of the Tasmanian Electricity Regulator under the Electricity Supply Industry (Price Control) Regulations); and
  - (d) the Tasmanian Electricity Code issued under section 49A of the Electricity Supply Industry Act.

### **application to connect**

An application made by a *Connection Applicant* in accordance with clause 5.3 for *connection* to a *network* and/or the provision of *network services* or modification of a *connection* to a *network* and/or the provision of *network services*.

### **approved pass through amount**

In respect of a *positive change event* for a *Transmission Network Service Provider*:

- (a) the amount which the *AER* determines should be passed through to *Transmission Network Users* under clause 6A.7.3(d)(2); or
- (b) the amount which the *AER* is taken to have determined under clause 6A.7.3(e)(1),

as the case may be.

In respect of a *positive change event* for a *Distribution Network Service Provider*:

- (a) the amount the *AER* determines should be passed through to *Distribution Network Users* under clause 6.6.1(d)(2); or
- (b) the amount the *AER* is taken to have determined under clause 6.6.1(e)(3),

as the case may be.

**approved pricing proposal**

*A pricing proposal approved by the AER.*

**ASRR**

*The annual service revenue requirement.*

**asynchronous generating unit**

*A generating unit that is not a synchronous generating unit.*

**attributable connection point cost share**

Has the meaning set out in clause 6A.22.4.

**attributable cost share**

Has the meaning set out in clause 6A.22.3.

**auction**

*A settlement residue auction held under clause 3.18.*

**auction amounts**

All amounts:

- (1) payable to *NEMMCO* or *eligible persons* under *SRD agreements*; or
- (2) distributed to *Network Service Providers* under clause 3.18.4; or
- (3) recovered by *NEMMCO* under clause 3.18.4 or the *auction rules*.

**auction expense fees**

The costs and expenses incurred by *NEMMCO* referred to in clause 3.18.4(b).



**auction participation agreement**

Has the meaning given in clause 3.18.1(a).

**auction rules**

The rules developed by *NEMMCO* under clause 3.18.3, as amended from time to time in accordance with that clause.

**augment, augmentation**

Works to enlarge a *network* or to increase the capability of a *network* to transmit or distribute *active energy*.

**augmentation technical report**

A report by the *Inter-regional Planning Committee* of an *augmentation* under clause 5.6.3(j).

**Australian Standard (AS)**

The most recent edition of a standard publication by Standards Australia (Standards Association of Australia).

**Authority**

Any government, government department, instrumentality, *Minister*, agency, statutory authority or other body in which a government has a controlling interest, and includes the *AEMC*, *NEMMCO*, the *AER* and the *ACCC* and their successors.

**automatic access standard**

In relation to a technical requirement of access, a standard of performance, identified in a schedule of Chapter 5 as an automatic access standard for that technical requirement, such that a *plant* that meets that standard would not be denied access because of that technical requirement.

**automatic generation control system (AGC)**

The system into which the *loading levels* from economic *dispatch* will be entered for *generating units* operating on automatic generation control in accordance with clause 3.8.21(d).

**automatic reclose equipment**

In relation to a *transmission line* or *distribution line*, the equipment which automatically recloses the relevant line's circuit breaker(s) following their opening as a result of the detection of a fault in the *transmission line* or the *distribution line* (as the case may be).

**available capacity**

The total MW capacity available for *dispatch* by a *scheduled generating unit*, *semi-scheduled generating unit* or *scheduled load* (i.e. maximum plant

availability) or, in relation to a specified *price band*, the MW capacity within that *price band* available for *dispatch* (i.e. availability at each price band).

**average electrical energy loss**

The volume-weighted average of the *electrical energy losses* incurred in each *trading interval* over all *trading intervals* in a defined period of time

**average loss factor**

A multiplier used to describe the *average electrical energy loss* for electricity used or transmitted.

**avoided Customer TUOS charges**

The charges described in rule 5.5(h).

**B2B Communications**

Communications between *Local Retailers*, *Market Customers* and *Distribution Network Service Providers* relating to an end-user or *supply* to an end-user provided for in the *B2B Procedures*.

**B2B Data**

Data relating to *B2B Communications*.

**B2B Decision**

A decision of *NEMMCO* to approve or not approve an *Information Exchange Committee Recommendation*.

**B2B Determination Dispute**

A dispute in relation to either a *B2B Decision* or an *Information Exchange Committee Recommendation*.

**B2B e-Hub**

An electronic information exchange platform established by *NEMMCO* to facilitate *B2B Communications*.

**B2B Objective**

The benefits from *B2B Communications* to *Local Retailers*, *Market Customers* and *Distribution Network Service Providers* as a whole should outweigh the detriments to *Local Retailers*, *Market Customers* and *Distribution Network Service Providers* as a whole.

**B2B Principles**

The following principles:

- (a) *B2B Procedures* should provide a uniform approach to *B2B Communications* in *participating jurisdictions* in which there are no *franchise customers*;
- (b) *B2B Procedures* should detail operational and procedural matters and technical requirements that result in efficient, effective and reliable *B2B Communications*;
- (c) *B2B Procedures* should avoid unreasonable discrimination between *Local Retailers*, *Market Customers* and *Distribution Network Service Providers*; and
- (d) *B2B Procedures* should protect the confidentiality of commercially sensitive information.

### **B2B Procedures**

Procedures prescribing the content of, the processes for, and the information to be provided to support, *B2B Communications*.

### **B2B Procedures Change Pack**

A document consisting of:

- (a) a *B2B Proposal*;
- (b) a report setting out an overview of the likely impact of the *B2B Proposal* on *NEMMCO*, *Local Retailers*, *Market Customers* and *Distribution Network Service Providers*;
- (c) draft *B2B Procedures* (incorporating proposed changes in mark up, where appropriate); and
- (d) an issues paper explaining why the *B2B Proposal* is being presented.

### **B2B Proposal**

A proposal for *B2B Procedures*, or a *change* to the *B2B Procedures*, which is the subject of consultation by the *Information Exchange Committee*.

### **bank bill rate**

On any *day*, the rate determined by *NEMMCO* (having regard to such market indicators as *NEMMCO* in its discretion selects) to be the market rate as at 10.00 am on that *day* (or if not a *business day*, on the previous *business day*) for Australian dollar denominated bank accepted bills of exchange having a tenor of 30 *days*.

### **billing period**

The period of 7 *days* commencing at the start of the *trading interval* ending 12.30 am Sunday.

### **black start capability**

A capability that allows a *generating unit*, following its *disconnection* from the *power system*, to be able to deliver electricity to either:

- (a) its *connection point*; or

- (b) a suitable point in the *network* from which *supply* can be made available to other *generating units*,

without taking *supply* from any part of the *power system* following *disconnection*.

**black system**

The absence of *voltage* on all or a significant part of the *transmission system* or within a *region* during a *major supply disruption* affecting a significant number of customers.

**breaker fail**

In relation to a *protection system*, that part of the *protection system* that protects a *Market Participant's facilities* against the non-operation of a circuit breaker that is required to open.

**breaker fail protection system**

A *protection system* that protects a *facility* against the non-operation of a circuit breaker that is required to open to clear a fault.

**building block determination**

The component of a distribution determination relevant to the regulation of *standard control services* (See rule 6.3).

**building block proposal**

For a *Distribution Network Service Provider*, the part of the provider's *regulatory proposal* relevant to the regulation of *standard control services* (See clause 6.3.1).

**busbar**

A common *connection point* in a *power station switchyard* or a *transmission network substation*.

**business day**

A *day* other than a Saturday, Sunday or a *day* which is lawfully observed as a national public holiday on the same *day* in each of the *participating jurisdictions*.

**call amount**

The amount determined pursuant to the formula in clause 3.3.11 for the purposes of a *call notice* where the *outstandings* of a *Market Participant* exceed its *trading limit*.

**call notice**

A notice issued by *NEMMCO* pursuant to clause 3.3.11 where the *outstandings* of a *Market Participant* exceed its *trading limit*.

**capacitor bank**

Electrical equipment used to generate *reactive power* and therefore support *voltage* levels on *distribution* and *transmission lines* in periods of high *load*.

**capital expenditure criteria**

For a *Transmission Network Service Provider* – the matters listed in clause 6A.6.7(c)(1)–(3).

For a *Distribution Network Service Provider* – the matters listed in clause 6.5.7(c)(1)–(3).

**capital expenditure factors**

For a *Transmission Network Service Provider* – the factors listed in clause 6A.6.7(e)(1)–(10).

For a *Distribution Network Service Provider* – the factors listed in clause 6.5.7(e)(1)–(10).

**capital expenditure objectives**

For a *Transmission Network Service Provider* – the objectives set out in clause 6A.6.7(a).

For a *Distribution Network Service Provider* – the objectives set out in clause 6.5.7(a).

**cascading outage**

The occurrence of an uncontrollable succession of *outages*, each of which is initiated by conditions (e.g. instability or overloading) arising or made worse as a result of the event preceding it.

**categories of prescribed transmission services**

For the purposes of pricing for *prescribed transmission services*:

- (a) *prescribed entry services*;
- (b) *prescribed exit services*;
- (c) *prescribed common transmission services*; and
- (d) *prescribed TUOS services*.

**central dispatch**

The process managed by *NEMMCO* for the *dispatch* of *scheduled generating units*, *semi-scheduled generating units*, *scheduled loads*, *scheduled network services* and *market ancillary services* in accordance with rule 3.8.

**change**

Includes amendment, alteration, addition or deletion.

**charging parameters**

The constituent elements of a tariff.

**check meter**

A *meter*, other than a *revenue meter*, used as a source of *metering data* for Type 1 and Type 2 *metering installations* as specified in schedule 7.2.

**check metering data**

The *metering data* obtained from a *check metering installation*.

**check metering installation**

A *metering installation* used as the source of *metering data* for validation in the *settlements* process.

**clause 4.8.9 instruction**

Has the meaning given in clause 4.8.9(a1)(2).

**COAG**

Council of Australian Governments.

**commercial arbitrator**

A dispute resolution panel (within the meaning of section 58 of the *National Electricity Law*) established pursuant to clause 6A.30.2(b).

**commitment**

The commencement of the process of starting up and *synchronising* a *generating unit* to the *power system*.

**common service**

A service that ensures the integrity of a *distribution system* and benefits all *Distribution Customers* and cannot reasonably be allocated on a locational basis.

**communication link**

All communications equipment, processes and arrangements that lie between the *meter* and the *data logger*, where the *data logger* is external to the device that contains the *measurement elements*, and/or the *data logger* and the telecommunications network.

**compensation recovery amount**

Has the meaning given in clause 3.15.8(a).

**complainant**

The party which refers a dispute to the *Adviser* in accordance with clause 8.2.5(a).

### **confidential information**

In relation to a *Registered Participant* or *NEMMCO*, information which is or has been provided to that *Registered Participant* or *NEMMCO* under or in connection with the *Rules* and which is stated under the *Rules*, or by *NEMMCO*, the *AER* or the *AEMC*, to be *confidential information* or is otherwise confidential or commercially sensitive. It also includes any information which is derived from such information.

### **congestion information resource**

An information resource comprising:

- (a) information on *planned network events* that are likely to materially affect *network constraints* in relation to a *transmission system*;
- (b) historical data on *mis-pricing* at *transmission network nodes* in the *national electricity market*; and
- (c) any other information that *NEMMCO*, in its reasonable opinion, considers relevant to implement the *congestion information resource objective*,

that is developed, *published* and amended from time to time by *NEMMCO* in accordance with rule 3.7A.

### **congestion information resource guidelines**

Guidelines developed and *published* by *NEMMCO* in accordance with rule 3.7A(k) to (m).

### **congestion information resource objective**

The objective of the *congestion information resource* which is set out in rule 3.7A(a).

### **connect, connected, connection**

To form a physical link to or through a *transmission network* or *distribution network*.

### **connection agreement**

An agreement between a *Network Service Provider* and a *Registered Participant* or other person by which the *Registered Participant* or other person is *connected* to the *Network Service Provider's transmission* or *distribution network* and/or receives *transmission services* or *distribution services*. In some *participating jurisdictions*, the *Registered Participant* or other person may have one *connection agreement* with a *Network Service Provider* for *connection services* and another agreement with a different *Network Service Provider* for *network services* provided by the *transmission network*.

### **Connection Applicant**

A person who wants to establish or modify *connection* to a *transmission network* or *distribution network* and/or who wishes to receive *network services* and who makes a *connection* enquiry as described in clause 5.3.2.

### **connection assets**

Those components of a *transmission or distribution system* which are used to provide *connection services*.

### **connection point**

The agreed point of *supply* established between *Network Service Provider(s)* and another *Registered Participant, Non-Registered Customer* or *franchise customer*.

### **connection service**

An *entry service* (being a service provided to serve a *Generator* or a group of *Generators*, or a *Network Service Provider* or a group of *Network Service Providers*, at a single *connection point*) or an *exit service* (being a service provided to serve a *Transmission Customer* or *Distribution Customer* or a group of *Transmission Customers* or *Distribution Customers*, or a *Network Service Provider* or a group of *Network Service Providers*, at a single *connection point*).

### **considered project**

- (a) In respect of a *transmission network augmentation*, a project that meets the following criteria:
  - (1) the *Network Service Provider* has acquired the necessary land and easements;
  - (2) the *Network Service Provider* has obtained all necessary planning and development approvals;
  - (3) as applicable:
    - (i) the *augmentation* project has passed the *regulatory test*;
    - (ii) in respect of a *new small transmission network asset*, an intention to proceed with the project has been published in the *Network Service Provider's Annual Planning Report*; or
    - (iii) in respect of a *funded augmentation* the arrangements have been made for its funding; and
  - (4) construction has either commenced or the *Network Service Provider* has set a firm date for it to commence.



- (b) In respect of a *distribution network augmentation*, a project that meets the following criteria:
- (1) the *Network Service Provider* has acquired the necessary land and easements;
  - (2) the *Network Service Provider* has obtained all necessary planning and development approvals; and
  - (3) construction has either commenced or the *Network Service Provider* has set a firm date for it to commence.

**constrained off**

In respect of a *generating unit*, the state where, due to a *constraint* on a *network*, the output of that *generating unit* is limited below the level to which it would otherwise have been *dispatched* by NEMMCO on the basis of its *dispatch offer*.

**constrained on**

In respect of a *generating unit*, the state where, due to a *constraint* on a *network*, the output of that *generating unit* is limited above the level to which it would otherwise have been *dispatched* by NEMMCO on the basis of its *dispatch offer*.

**constraint, constrained**

A limitation on the capability of a *network*, *load* or a *generating unit* such that it is unacceptable to either transfer, consume or generate the level of electrical power that would occur if the limitation was removed.

**consulting party**

The person who is required to comply with the *Rules consultation procedures*.

**contestable**

- (a) In relation to *transmission services* a service which is permitted by the laws of the relevant *participating jurisdiction* to be provided by more than one *Transmission Network Service Provider* as a contestable service or on a competitive basis.
- (b) In relation to *distribution services*, a service which is permitted by the laws of the relevant *participating jurisdiction* to be provided by more than one *Distribution Network Service Provider* as a contestable service or on a competitive basis.

**contingency capacity reserve**

Actual *active* and *reactive energy* capacity, *interruptible load* arrangements and other arrangements organised to be available to be utilised on the actual occurrence of one or more *contingency events* to allow the restoration and maintenance of *power system security*.

### **contingency capacity reserve standards**

The standards set out in the *power system security and reliability standards* to be used by *NEMMCO* to determine the levels of *contingency capacity reserves* necessary for *power system security*.

### **contingency event**

An event described in clause 4.2.3(a).

### **contingent project**

In relation to a *revenue determination*, a *proposed contingent project* that is determined by the *AER*, in accordance with clause 6A.8.1(b), to be a *contingent project* for the purposes of that *revenue determination*.

### **continuous uninterrupted operation**

In respect of a *generating system* or operating *generating unit* operating immediately prior to a *power system* disturbance, not *disconnecting* from the *power system* except under its *performance standards* established under clauses S5.2.5.8 and S5.2.5.9 and, after clearance of any electrical fault that caused the disturbance, only substantially varying its *active power* and *reactive power* required by its *performance standards* established under clauses S5.2.5.11, S5.2.5.13 and S5.2.5.14, with all essential auxiliary and *reactive plant* remaining in service, and responding so as to not exacerbate or prolong the disturbance or cause a subsequent disturbance for other *connected plant*.

### **control centre**

The *facilities* used by *NEMMCO* for managing *power system security* and administering the *market*.

### **control system**

Means of monitoring and controlling the operation of the *power system* or equipment including *generating units connected to a transmission or distribution network*.

### **Convener**

The *representative* appointed by *NEMMCO* in accordance with clause 5.6.3 to convene the *Inter-regional Planning Committee*.

### **Co-ordinated Universal Time (UTC)**

The time as determined by the International Bureau of Weights and Measures and maintained under section 8AA of the *National Measurement Act*.

### **Co-ordinating Network Service Provider**

A *Network Service Provider* appointed by multiple *Transmission Network Service Providers* to allocate *AARR* in accordance with rule 6A.29.

### **Cost Allocation Guidelines**

For a *Transmission Network Service Provider* – the guidelines referred to in clause 6A.19.3.

For a *Distribution Network Service Provider* – the guidelines referred to in clause 6.15.3.

### **Cost Allocation Method**

For a *Distribution Network Service Provider*, the Cost Allocation Method approved by the *AER* for that *Distribution Network Service Provider* under clause 6.15.4(c) and (d) as amended from time to time in accordance with clause 6.15.4(f) and (g).

### **Cost Allocation Methodology**

For a *Transmission Network Service Provider*, the Cost Allocation Methodology approved or taken to be approved by the *AER* for that *Transmission Network Service Provider* under clauses 6A.19.4(c) and (d) as amended from time to time in accordance with clauses 6A.19.4(f) and (g).

### **Cost Allocation Principles**

For a *Transmission Network Service Provider* – the principles set out in clause 6A.19.2.

For a *Distribution Network Service Provider* – the principles set out in clause 6.15.2.

### **cost reflective network pricing**

A cost allocation method which reflects the value of assets used to provide *transmission or distribution services* to *Network Users*.

### **cost reflective network pricing methodology or CRNP methodology or modified CRNP methodology**

The cost allocation methodologies described in schedule 6A.3.

### **CPI**

As at a particular time, the Consumer Price Index: All Groups Index Number, weighted average of eight capital cities published by the Australian Bureau of Statistics for the most recent quarter that precedes that particular time and for which the index referred to has been published by the Australian Bureau of Statistics as at that time. If that index ceases to be published or is substantially changed, *CPI* will be such other index as is determined by the *AER* as a suitable benchmark for recording general movements in prices.

**credible contingency event**

An event described in clause 4.2.3(b), certain examples of which are set out in schedule 5.1.

**credit period**

The typical period of days over which *maximum credit limit* is calculated in accordance with schedule 3.3.

**credit support**

An obligation owed to *NEMMCO* by a third party supporting the obligations of a *Market Participant* and having the characteristics required by clause 3.3.2.

**credit support provider**

The issuing party that assumes obligations to *NEMMCO* pursuant to a *credit support*.

**cumulative price threshold**

The threshold for imposition of an *administered price cap* as defined in clause 3.14.1.

**current rating**

The maximum current that may be permitted to flow (under defined conditions) through a *transmission line* or *distribution line* or other item of equipment that forms part of a *power system*.

**current transformer (CT)**

A *transformer* for use with *meters* and/or protection devices in which the current in the secondary winding is, within prescribed error limits, proportional to and in phase with the current in the primary winding.

**Customer**

A person who:

1. engages in the activity of purchasing electricity *supplied* through a *transmission or distribution system* to a *connection point*; and
2. is registered by *NEMMCO* as a *Customer* under Chapter 2.

**Customer transmission use of system, Customer transmission use of system service**

A service provided to a *Transmission Network User* for use of the *transmission network* for the conveyance of electricity (including where it has been negotiated in accordance with clause 5.4A(f)(3)) that can be reasonably allocated to a *Transmission Network User* on a locational basis, but does not include *Generator transmission use of system services*.

**data collection system**

All equipment and arrangements that lie between the *metering database* and the point where the *metering data* enters the *telecommunications network*.

**data logger**

A *metering installation* database or a device that collects electronic signals from a *measurement element* and packages it into 30 minute intervals (or sub-multiples). This device may contain data storage capability, be a separate item of equipment, and/or be combined with the *energy* measuring components within one physical device.

**day**

Unless otherwise specified, the 24 hour period beginning and ending at midnight Eastern Standard Time (EST).

**declared NEM project**

A project determined to be a declared NEM project under clause 2.11.1(ba) or 2.11.1(bd), for which there is special treatment in the timing of cost recovery.

**decommission, decommit**

In respect of a *generating unit*, ceasing to generate and *disconnecting* from a *network*.

**default dispatch bid**

A *dispatch bid* made pursuant to clause 3.8.9.

**default dispatch offer**

A *dispatch offer* made pursuant to clause 3.8.9.

**default event**

An event defined as such in clause 3.15.21(a).

**default notice**

A notice issued by *NEMMCO* pursuant to clause 3.15.21(b)(1).

**defaulting Market Participant**

A *Market Participant* in relation to which a *default event* has occurred.

**delayed lower service**

The service of providing, in accordance with the *market ancillary service specification*, the capability of controlling the level of *generation* or *load* associated with a particular *facility* in response to a change in the *frequency* of the *power system* beyond a threshold or in accordance with electronic signals from

*NEMMCO* in order to lower that *frequency* to within the *normal operating frequency band*.

**delayed raise service**

The service of providing, in accordance with the *market ancillary service specification*, the capability of controlling the level of *generation* or *load* associated with a particular *facility* in response to a change in the *frequency* of the *power system* beyond a threshold or in accordance with electronic signals from *NEMMCO* in order to raise that *frequency* to within the *normal operating frequency band*.

**delayed response capacity reserve**

That part of the *contingency capacity reserve* capable of realisation within 5 minutes of a major *frequency* decline in the *power system* as described further in the *power system security and reliability standards*.

**delayed service**

A *delayed raise service* or a *delayed lower service*.

**demand based price**

A price expressed in dollars per kilowatt per time period or dollars per kilovolt ampere per time period.

**demand management incentive scheme**

An incentive scheme for certain *Distribution Network Service Providers* developed and *published* by the *AER* under clause 6.6.3.

**deprival value**

A value ascribed to assets which is the lower of economic value or optimised depreciated replacement value.

**derogation**

Has the meaning given in the *National Electricity Law*.

**de-synchronising/de-synchronisation**

The act of *disconnection* of a *generating unit* from the *connection point* with the *power system*, normally under controlled circumstances.

**direct control service**

A *distribution service* that is a direct control network service within the meaning of section 2B of the *Law*.

**Directed Participant**

A *Scheduled Generator, Semi-Scheduled Generator, Market Generator, Scheduled Network Service Provider* or *Market Customer* the subject of a *direction*.

**direction**

Has the meaning given in clause 4.8.9(a1)(1).

**directional interconnector**

Has the meaning given in clause 3.18.1(c).

**Disclosee**

In relation to a *Registered Participant* or *NEMMCO*, a person to whom that *Registered Participant* or *NEMMCO* (as the case may be) discloses *confidential information*.

**disconnect, disconnected, disconnection**

The operation of switching equipment or other action so as to prevent the flow of electricity at a *connection point*.

**dispatch**

The act of initiating or enabling all or part of the response specified in a *dispatch bid, dispatch offer* or *market ancillary service offer* in respect of a *scheduled generating unit, semi-scheduled generating unit, a scheduled load, a scheduled network service, an ancillary service generating unit* or an *ancillary service load* in accordance with rule 3.8, or a *direction* or operation of capacity the subject of a *reserve contract* as appropriate.

**dispatch algorithm**

The algorithm used to determine *central dispatch* developed by *NEMMCO* in accordance with clause 3.8.1(d).

**dispatch bid**

A notice submitted by a *Market Participant* to *NEMMCO* relating to the *dispatch* of a *scheduled load* in accordance with clause 3.8.7.

**dispatch inflexibility profile**

Data which may be provided to *NEMMCO* by *Market Participants*, in accordance with clause 3.8.19, to specify *dispatch inflexibilities* in respect of *scheduled loads* or *scheduled generating units* which are not *slow start generating units*.

**dispatch instruction**

An instruction given to a *Registered Participant* under clauses 4.9.2, 4.9.2A, 4.9.3 or 4.9.3A.

**dispatch interval**

A period defined in clause 3.8.21(a1) in which the *dispatch algorithm* is run in accordance with clause 3.8.21(b).

**dispatch level**

Means:

- (1) for a *semi-dispatch interval*, the amount of electricity specified in a *dispatch instruction* as the *semi-scheduled generating unit's* maximum permissible *active power* at the end of the *dispatch interval* specified in the *dispatch instruction*; and
- (2) for a *non semi-dispatch interval*, an estimate of the *active power* at the end of the *dispatch interval* specified in the *dispatch instruction*.

**dispatch offer**

A *generation dispatch offer* or a *network dispatch offer*.

**dispatch offer price**

The price submitted by a *Scheduled Generator*, *Semi-Scheduled Generator* or a *Scheduled Network Service Provider* for a *price band* and a *trading interval* in a *dispatch offer*.

**dispatch optimisation software**

The computer program used by *NEMMCO* for computing the *dispatch algorithm*.

**dispatch price**

The price determined for each *regional reference node* by the *dispatch algorithm* each time it is run by *NEMMCO*.

**dispatched generating unit**

A *scheduled generating unit* which has received instructions from *NEMMCO* in accordance with a *dispatch schedule*.

**dispatched generation**

The *generation* which has been *dispatched* as part of *central dispatch*.

**dispatched Generator**

A *Generator* who has received a *dispatch instruction* from *NEMMCO*.

**dispatched load**

The *load* which has been *dispatched* as part of *central dispatch*.



**dispute management system (or “DMS”)**

The dispute management system which each *Registered Participant* and *NEMMCO* must adopt in accordance with clause 8.2.3.

**dispute resolution panel (or “DRP”)**

A dispute resolution panel established pursuant to clause 8.2.6A.

**distribution**

Activities pertaining to a *distribution system* including the conveyance of electricity through that *distribution system*.

**distribution consultation procedures**

The procedures set out in Part G of Chapter 6.

**Distribution Customer**

*A Customer, Distribution Network Service Provider, Non-Registered Customer or franchise customer having a connection point with a distribution network.*

**distribution line**

A power line, including underground cables, that is part of a *distribution network*.

**distribution loss factor**

An *average loss factor* calculated according to clause 3.6.3.

**distribution losses**

*Electrical energy losses* incurred in distributing electricity over a *distribution network*.

**distribution network**

*A network* which is not a *transmission network*.

**distribution network connection point**

*A connection point* on a *distribution network*.

**Distribution Network Service Provider**

A person who engages in the activity of owning, controlling, or operating a *distribution system*.

**Distribution Network Service Provider Member**

*A Member* appointed to the *Information Exchange Committee* in that membership category as set out in the *Information Exchange Committee Election Procedures*.

**Distribution Network User**

*A Distribution Customer* or an *Embedded Generator*.

**distribution network user access**

The *power transfer capability* of the *distribution network* in respect of:

- (a) *generating units* or a group of *generating units*; and
- (b) *network elements*,

at a *connection point* which has been negotiated in accordance with rule 5.5.

**Distribution Ring-Fencing Guidelines**

The guidelines developed by the *AER* under clause 6.17.2.

**distribution service**

A service provided by means of, or in connection with, a *distribution system*.

**distribution services access dispute**

A dispute referred to in clause 6.22.1.

**distribution standard control service revenue**

Has the meaning given in rule 6.26(b)(2).

**distribution system**

A *distribution network*, together with the *connection assets* associated with the *distribution network*, which is connected to another *transmission or distribution system*.

*Connection assets* on their own do not constitute a *distribution system*.

**Distribution System Operator**

A person who is responsible, under the *Rules* or otherwise, for controlling or operating any portion of a *distribution system* (including being responsible for directing its operations during *power system* emergencies) and who is registered by *NEMMCO* as a *Distribution System Operator* under Chapter 2.

**distribution use of system, distribution use of system service**

A service provided to a *Distribution Network User* for use of the *distribution network* for the conveyance of electricity that can be reasonably allocated on a locational and/or *voltage* basis.

**DMS**

A dispute management system.

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**DMS Contact**

A person appointed by a *Registered Participant* or *NEMMCO* pursuant to its *DMS* to be the first point of contact for the notification of disputes under clause 8.2.

**DMS referral notice**

A notice served on a *DMS Contact* pursuant to clause 8.2.4(a).

**DRP**

A *dispute resolution panel*.

**dual function asset**

Means any part of a *network* owned, operated or controlled by a *Distribution Network Service Provider* which operates between 66 kV and 220 kV and which operates in parallel, and provides support, to the higher voltage *transmission network* which is deemed by clause 6.24.2(a) to be a *dual function asset*. For the avoidance of doubt:

- (a) a *dual function asset* can only be an asset which forms part of a *network* that is predominantly a *distribution network*; and
- (b) an asset which forms part of a *network* which is predominantly a *transmission network* cannot be characterised as a *dual function asset*,

through the operation of clause 6.24.2(a).

**dynamic performance**

The response and behaviour of *networks* and *facilities* which are *connected* to the *networks* when the *satisfactory operating state* of the *power system* is disturbed.

**EAAP guidelines**

The guidelines *published* by *NEMMCO* in accordance with clause 3.7C(k) that *NEMMCO* must comply with in preparing the *EAAP*.

**EAAP principles**

The principles referred to in clause 3.7C(b) that *NEMMCO* must comply with in preparing the *EAAP* and the *EAAP guidelines*.

**Eastern Standard Time (EST)**

The time which is set at 10 hours in advance of *Co-ordinated Universal Time*.

**efficiency benefit sharing scheme**

For a *Transmission Network Service Provider* – a scheme developed and *published* by the *AER* under clause 6A.5.

For a *Distribution Network Service Provider* – a scheme developed and *published* by the *AER* under clause 6.5.8.

**efficiency benefit sharing scheme parameters**

For an *efficiency benefit sharing scheme*, those parameters that are *published* by the *AER* in respect of that scheme pursuant to clause 6A.6.5(c).

**electrical energy loss**

*Energy* loss incurred in the production, transportation and/or use of electricity.

**electrical sub-network**

A part of the *national grid* determined by *NEMMCO* in accordance with clause 3.11.4B.

**electronic communication system**

Includes the electronic communication and the *electronic data transfer* system provided to *Registered Participants* by *NEMMCO*.

**electronic data transfer**

The transfer of data by electronic means from one location to another.

**eligible pass through amount**

In respect of a *positive change event* for a *Transmission Network Service Provider*, the increase in costs in the provision of *prescribed transmission services* that the *Transmission Network Service Provider* has incurred and is likely to incur until the end of the *regulatory control period* as a result of that *positive change event* (as opposed to the revenue impact of that event).

In respect of a *positive change event* for a *Distribution Network Service Provider*, the increase in costs in the provision of *direct control services* that the *Distribution Network Service Provider* has incurred and is likely to incur until the end of the *regulatory control period* as a result of that *positive change event* (as opposed to the revenue impact of that event).

**eligible person**

Has the meaning given in clause 3.18.2(b).

**embedded generating unit**

A *generating unit* connected within a *distribution network* and not having direct access to the *transmission network*.

**Embedded Generator**

A *Generator* who owns, operates or controls an *embedded generating unit*.

**enabled**

A *market ancillary service* is enabled when *NEMMCO* has selected the relevant *generating unit* or *load* for the provision of the *market ancillary service* and has notified the relevant *Market Participant* accordingly.

**enablement limit**

In relation to any *market ancillary service offer*, the level of associated *generation* or *load* (in MW) above or below which no response is specified as being available.

**enabling price**

Has the meaning given in clause 3.8.7A(d).

**energise/energisation**

The act of operation of switching equipment or the start-up of a *generating unit*, which results in there being a non-zero *voltage* beyond a *connection point* or part of the *transmission* or *distribution network*.

**energy**

*Active energy* and/or *reactive energy*.

**energy adequacy assessment projection (EAAP)**

A projection of *NEMMCO's* assessment of *energy* availability that accounts for *energy constraints* for each month over a 24 month period, which is prepared and *published* in accordance with rule 3.7C and is measured as *unserved energy* for each *region*.

**energy based price**

A price expressed in cents per kilowatt hour of *energy*.

**energy constrained scheduled generating unit**

A *scheduled generating unit* in respect of which the amount of electricity it is capable of *supplying* on a *trading day* is less than the amount of electricity it would *supply* on that *trading day* if it were *dispatched* to its full nominated availability for the whole *trading day*.

**energy constrained scheduled load**

A *scheduled load* in respect of which the amount of electricity it can take in a *trading day*, if *normally off*, or it can *off-load*, if *normally on*, is *constrained*.

**energy constraint**

A limitation on the ability of a *generating unit* or group of *generating units* to generate *active power* due to the restrictions in the availability of fuel or other

necessary expendable resources such as, but not limited to, gas, coal, or water for operating turbines or for cooling.

### **energy conversion model**

The model that defines how the *intermittent* input energy source (such as wind) is converted by the *semi-scheduled generating unit* into electrical output. That model must contain the information set out in the guidelines *published* by NEMMCO in accordance with clause 2.2.7(d).

### **energy data**

*Interval energy data* or *accumulated energy data*.

### **energy data services**

The services that involve:

- (1) collation of *energy data* from the *meter* or *meter/associated data logger*;
- (2) the processing of the *energy data* in the *metering installation* database;
- (3) storage of the *energy data* in the *metering installation* database; and
- (4) the provision of access to the data for those parties that have rights of access to the data.

### **energy packets**

The value of *energy data* which is accumulated for a period of 30 minutes and stored as a separate data record.

### **energy support arrangement**

A contractual arrangement between a *Generator* or *Network Service Provider* on the one hand, and a customer or *participating jurisdiction* on the other, under which *facilities* not subject to an *ancillary services agreement* for the provision of *system restart ancillary services* are used to assist *supply* to a customer during a *major supply disruption* affecting that customer, or customers generally in the *participating jurisdictions*, as the case may be.

### **entry charge**

The charge payable by an *Embedded Generator* to a *Distribution Network Service Provider* for an *entry service* at a *distribution network connection point*.

### **entry cost**

For each *distribution network connection point*, the amount of the *aggregate annual revenue requirement* for all individual assets classified as *entry service* assets which provide *entry service* for the *connection point*.

**entry service**

A service provided to serve a *Generator* or a group of *Generators*, or a *Network Service Provider* or a group of *Network Service Providers*, at a single *connection point*.

**estimated energy data**

The data that results from an estimation of the flow of electricity in a power conductor where the data applies to a *trading interval* or a period in excess of a *trading interval*. The estimation is made in relation to a *market load* and would not apply to a *metering point* where *accumulated energy data* or *interval energy data* is not available, or an *unmetered connection point*.

**excess generation**

Aggregate *self dispatch level* of *self-committed generation* which is in excess of the quantity needed to meet the expected *power system demand* and *reserve* requirements.

**excess generation period**

A period made up of one or more *dispatch intervals* where the sum of the aggregate of *generating unit self dispatch levels* and the required *regulating capability* (which forms part of the *contingency capacity reserves standard*) exceeds the forecast *load* or actual *load* during those *dispatch intervals*.

**excitation control system**

In relation to a *generating unit*, the automatic *control system* that provides the field excitation for the generator of the *generating unit* (including excitation limiting devices and any power system stabiliser).

**exit charge**

The charge payable by a *Distribution Customer* to a *Distribution Network Service Provider* for *exit service* at a *distribution network connection point*.

**exit cost**

For each *distribution network connection point*, the amount of the *aggregate annual revenue requirement* for all individual assets classified as *exit service* assets which provide *exit service* for the *connection point*.

**exit service**

A service provided to serve a *Transmission Customer* or *Distribution Customer* or a group of *Transmission Customers* or *Distribution Customers*, or a *Network Service Provider* or a group of *Network Service Providers*, at a single *connection point*.

**extension**

An *augmentation* that requires the *connection* of a power line or *facility* outside the present boundaries of the *transmission* or *distribution network* owned, controlled or operated by a *Network Service Provider*.

**extreme frequency excursion tolerance limits**

In relation to the *frequency* of the *power system*, means the limits so described and specified in the *power system security and reliability standards*.

**facilities**

A generic term associated with the apparatus, equipment, buildings and necessary associated supporting resources provided at, typically:

- (a) a *power station* or *generating unit*;
- (b) a *substation* or *power station switchyard*;
- (c) a *control centre* (being a *NEMMCO control centre*, or a *distribution* or *transmission network control centre*);
- (d) facilities providing an *exit service*.

**fast lower service**

The service of providing, in accordance with the requirements of the *market ancillary service specification*, the capability of rapidly controlling the level of *generation* or *load* associated with a particular *facility* in response to the locally sensed *frequency* of the *power system* in order to arrest a rise in that *frequency*.

**fast raise service**

The service of providing, in accordance with the requirements of the *market ancillary service specification*, the capability of rapidly controlling the level of *generation* or *load* associated with a particular *facility* in response to the locally sensed *frequency* of the *power system* in order to arrest a fall in that *frequency*.

**fault clearance time**

In respect of a *fault type*, the time within which the *protection system* is designed, operated and maintained to clear a *short circuit fault* of that *fault type* within its protection zone.

**fault type**

One of the following types of electrical fault:

- (a) three phase to ground fault;
- (b) three phase fault;



- (c) two phase to ground fault;
- (d) phase to phase fault; and
- (e) one phase to ground fault.

**final statement**

A statement issued by *NEMMCO* under clause 3.15.15 to a *Market Participant*.

**financial year**

A period commencing on 1 July in one calendar year and terminating on 30 June in the following calendar year.

**financially responsible**

In relation to any *market connection point*, a term which is used to describe the *Market Participant* which has either:

1. classified the *connection point* as one of its *market loads*;
2. classified the *generating unit connected* at that *connection point* as a *market generating unit*; or
3. classified the *network services* at that *connection point* as a *market network service*.

**First-Tier Customer**

A *Customer* which has classified any *load* as a *first-tier load* in accordance with Chapter 2.

**first-tier load**

Electricity purchased at a *connection point* directly and in its entirety from the *Local Retailer* and which is classified as a *first-tier load* in accordance with Chapter 2.

**framework and approach paper**

A document prepared and issued as a framework and approach paper under clause 6.8.1.

**franchise customer**

A person who does not meet its local jurisdiction requirements to make it eligible to be registered by *NEMMCO* as a *Customer* for a *load*.

**frequency**

For alternating current electricity, the number of cycles occurring in each second. The term Hertz (Hz) corresponds to cycles per second.

### **frequency operating standards**

The standards which specify the *frequency* levels for the operation of the *power system* set out in the *power system security and reliability standards*.

### **frequency response mode**

The mode of operation of a *generating unit* which allows automatic changes to the generated power when the *frequency* of the *power system* changes.

### **fully co-optimised network constraint formulation**

*A network constraint equation formulation that allows NEMMCO, through direct physical representation, to control all the variables within the equation that can be determined through the central dispatch process.*

### **funded augmentation**

*A transmission network augmentation* for which the *Transmission Network Service Provider* is not entitled to receive a charge pursuant to Chapter 6.

### **GELF parameters**

Variable parameters specific to a *Generator Energy Limitation Framework (GELF)* which are defined in the *EAAP guidelines* and supplement the *GELF*, and are submitted by a *Scheduled Generator* and updated in accordance with rule 3.7C for the purpose of the *EAAP*.

### **general purpose**

The term applied by the National Measurement Institute to refer to the classification of a *meter*.

### **generated**

In relation to a *generating unit*, the amount of electricity produced by the *generating unit* as measured at its terminals.

### **generating plant**

In relation to a *connection point*, includes all equipment involved in generating electrical *energy*.

### **generating system**

- (a) Subject to paragraph (b), for the purposes of the *Rules*, a system comprising one or more *generating units*.
- (b) For the purposes of clause 2.2.1(e)(3), clause 4.9.2, Chapter 5 and a *jurisdictional derogation* from Chapter 5, a system comprising one or more *generating units* and includes auxiliary or *reactive plant* that is located on

the *Generator's* side of the *connection point* and is necessary for the *generating system* to meet its *performance standards*.

### **Generating System Design Data Sheet**

The data sheet *published* by *NEMMCO* under clause S5.5.7(a)(1).

### **Generating System Model Guidelines**

The guidelines *published* by *NEMMCO* under clause S5.5.7(a)(3).

### **Generating System Setting Data Sheet**

The data sheet *published* by *NEMMCO* under clause S5.5.7(a)(2).

### **generating unit**

The actual generator of electricity and all the related equipment essential to its functioning as a single entity.

### **generation**

The production of electrical power by converting another form of energy in a *generating unit*.

### **generation centre**

A geographically concentrated area containing a *generating unit* or *generating units* with significant combined generating capability.

### **generation dispatch offer**

A notice submitted by a *Scheduled Generator* or *Semi-Scheduled Generator* to *NEMMCO* relating to the *dispatch* of a *scheduled generating unit* or a *semi-scheduled generating unit* in accordance with clause 3.8.6.

### **Generator**

A person who engages in the activity of owning, controlling or operating a *generating system* that is *connected* to, or who otherwise *supplies* electricity to, a *transmission* or *distribution system* and who is registered by *NEMMCO* as a *Generator* under Chapter 2 and, for the purposes of Chapter 5, the term includes a person who is required to, or intends to register in that capacity.

### **Generator Energy Limitation Framework (GELF)**

A description of the *energy constraints* that affect the ability of a *scheduled generating unit* to generate electricity prepared in accordance with the *EAAP guidelines*.

### **Generator transmission use of system, Generator transmission use of system service**

A service provided to a *Generator* for:

- (a) use of the *transmission network* which has been negotiated in accordance with clause 5.4A(f)(3)(i); or
- (b) use of a *new transmission network investment* asset for the conveyance of electricity that can be reasonably allocated to a *Generator* on a locational basis.

**global market ancillary service requirement**

Has the meaning given to it by clause 3.8.1(e2).

**good electricity industry practice**

The exercise of that degree of skill, diligence, prudence and foresight that reasonably would be expected from a significant proportion of operators of *facilities* forming part of the *power system* for the *generation, transmission* or *supply* of electricity under conditions comparable to those applicable to the relevant *facility* consistent with *applicable regulatory instruments, reliability, safety* and environmental protection. The determination of comparable conditions is to take into account factors such as the relative size, duty, age and technological status of the relevant *facility* and the *applicable regulatory instruments*.

**governor system**

The automatic *control system* which regulates the speed of the power turbine of a *generating unit* through the control of the rate of entry into the *generating unit* of the primary *energy* input (for example, steam, gas or water).

**hedge contract**

~~A contract between two or more parties affording one or each of them protection against certain financial risks.~~

**high voltage (HV)**

A *voltage* greater than 1 kV.

**Independent Member**

A *Member* appointed to the *Information Exchange Committee* in that membership category as set out in the *Information Exchange Committee Election Procedures*.

**independent person**

A person who:

- (a) is not a member, employee or member of staff of the *AER* or the *AEMC*;
- (b) is not a director or employee of *NEMMCO*;
- (c) is not a director or employee of, or partner in, a *Registered Participant*;

- (d) does not have a direct or indirect financial interest (whether as shareholder, partner or other equity participant) in any *Registered Participant* or a *related body corporate* of any *Registered Participant*, other than an interest of less than 0.1% of the net shareholders funds of that entity (as determined at the date the relevant person is appointed to carry out a function under the *Rules*); or
- (e) is not a director or employee of a *related body corporate* of any *Registered Participant*.

**independently controllable two-terminal link**

A *two-terminal link* through which the *power transfer* can be independently controlled within a range determined by the *power transfer capability* of the *two-terminal link* and the conditions prevailing in the rest of the *power system*.

**indexed amount**

As at any time and in relation to a dollar value that is expressly set out in Part C of Chapter 6 or Part C of Chapter 6A, that dollar value multiplied by  $CPI_a/CPI_b$

where:

$CPI_a$  is the *CPI* as at that time; and

$CPI_b$  is the Consumer Price Index: All Groups Index Number, weighted average of eight capital cities published by the Australian Bureau of Statistics for the quarter ending 30 June 2006.

**inflexible, inflexibility**

In respect of a *scheduled generating unit*, *scheduled load* or *scheduled network service* for a *trading interval* means that the *scheduled generating unit*, *scheduled load* or *scheduled network service* is only able to be *dispatched* in the *trading interval* at a fixed *loading level* specified in accordance with clause 3.8.19(a).

**Information Exchange Committee**

The committee established under clause 7.2A.2(a).

**Information Exchange Committee Annual Report**

The annual report prepared by the *Information Exchange Committee* in accordance with the *Information Exchange Committee Operating Manual*.

**Information Exchange Committee Election Procedures**

The procedures of that title which set out the process for election of *Members*.

### **Information Exchange Committee Operating Manual**

The manual of that title prepared by the *Information Exchange Committee* which sets out the processes pursuant to which the *Information Exchange Committee* operates.

### **Information Exchange Committee Recommendation**

A recommendation made by the *Information Exchange Committee* to NEMMCO to make *B2B Procedures* or to change the *B2B Procedures*.

### **Information Exchange Committee Working Groups**

The groups established by the *Information Exchange Committee* to assist with the *Information Exchange Committee Works Programme*.

### **Information Exchange Committee Works Programme**

The work programme prepared by the *Information Exchange Committee* in respect of the development, implementation and operation of the *B2B Procedures* and other matters which are incidental to effective and efficient *B2B Communications*.

### **information guidelines**

Guidelines made by the AER for the purpose of guiding a *Transmission Network Service Provider* in the submission of certified annual statements and other related information in accordance with clause 6A.17.2.

### **instrument transformer**

Either a *current transformer (CT)* or a *voltage transformer (VT)*.

### **insurance event**

An event for which the risk of its occurrence is the subject of insurance taken out by or for a *Transmission Network Service Provider*, for which an allowance is provided in the *total revenue cap* for the *Transmission Network Service Provider* and in respect of which:

- (a) the cost of the premium paid or required to be paid by the *Transmission Network Service Provider* in the *regulatory year* in which the cost of the premium changes is higher or lower than the premium that is provided for in the *maximum allowed revenue* for the provider for that *regulatory year* by an amount of more than 1% of the *maximum allowed revenue* for the provider for that *regulatory year*;
- (b) the risk eventuates and, as a consequence, the *Transmission Network Service Provider* incurs or will incur all or part of a deductible where the amount so incurred or to be so incurred in a *regulatory year* is higher or lower than the allowance for the deductible (if any) that is provided for in the *maximum allowed revenue* for the provider for that *regulatory year* by

an amount of more than 1% of the *maximum allowed revenue* for the provider for that *regulatory year*;

- (c) insurance becomes unavailable to the *Transmission Network Service Provider*; or
- (d) insurance becomes available to the *Transmission Network Service Provider* on terms materially different to those existing as at the time the *revenue determination* was made (other than as a result of any act or omission of the provider which is inconsistent with good electricity industry practice).

### **intending load**

A proposed purchase of electricity at a *connection point* (the location of which may be undefined) which is classified as an *intending load* in accordance with Chapter 2.

### **Intending Participant**

A person who is registered by *NEMMCO* as an *Intending Participant* under Chapter 2.

### **interconnection, interconnector, interconnect, interconnected**

A *transmission line* or group of *transmission lines* that connects the *transmission networks* in adjacent *regions*.

### **interconnector flow**

The quantity of electricity in MW being transmitted by an *interconnector*.

### **interested party**

1. In Chapter 5, a person including an end user or its *representative* who, in *NEMMCO's* opinion, has or identifies itself to *NEMMCO* as having an interest in relation to the *network* planning and development activities covered under clause 5.6 or in the determination of *plant standards* covered under clause 5.3.3(b2).
- 1A. Notwithstanding the definition in 1. above, in clause 5.6.6(j), a person including an end user or its *representative* who, in the *AER's* opinion, has or identifies itself to the *AER* as having, the potential to suffer a material and adverse market impact from the *new large transmission network asset* identified in the clause 5.6.6(j) final report.
2. In Chapter 6 or Chapter 6A, a person (not being a *Registered Participant* or *NEMMCO*) that has, in the *AER's* opinion, or identifies itself to the *AER* as having, an interest in the *Transmission Ring-Fencing Guidelines* or the *Distribution Ring-Fencing Guidelines*.
3. **[Deleted]**

4. In Chapter 2, a person including an end user or its *representative* who, in *NEMMCO's* opinion, has or identifies itself to *NEMMCO* as having an interest in relation to the structure of *Participant Fees*.

**interim statement**

Has the meaning given in clause 3.3.11(a)(1).

**intermediary**

A person who is registered by *NEMMCO* as a *Generator* or a *Network Service Provider* instead of another person who, in the absence of an exemption under clause 2.9.3, would be required to be registered as such under the *Rules*.

**intermittent**

A description of a *generating unit* whose output is not readily predictable, including, without limitation, solar generators, wave turbine generators, wind turbine generators and hydro-generators without any material storage capability.

**inter-network test**

A test conducted for the purpose of verifying the magnitude of the *power transfer capability* of more than one *transmission network* in accordance with clause 5.7.7.

**inter-network testing constraint**

A *constraint* on a *transmission network* as contemplated by clause 5.7.7.

**inter-regional**

Between *regions*.

**inter-regional loss factor**

A *marginal loss factor* determined according to clause 3.6.1.

**inter-regional losses**

Has the meaning given to it by clause 3.6.1(a).

**~~inter-regional network constraint~~**

~~A constraint on the transmission and/or distribution networks between regions as specified in clause 3.6.4(a).~~

**Inter-regional Planning Committee**

The committee established in accordance with clause 5.6.3.

**interruptible load**

A *load* which is able to be *disconnected*, either manually or automatically initiated, which is provided for the restoration or control of the *power system frequency* by *NEMMCO* to cater for *contingency events* or shortages of *supply*.



**interval energy data**

The data that results from the measurement of the flow of electricity in a power conductor where the data is prepared by a *data logger* into intervals which correspond to a *trading interval* or are sub-multiples of a *trading interval*.

**intervention price dispatch interval**

A *dispatch interval* declared by NEMMCO to be an *intervention price dispatch interval* in accordance with clause 3.9.3.

**intervention price trading interval**

A *trading interval* in which NEMMCO has declared an *intervention price dispatch interval* in accordance with clause 3.9.3.

**intervention settlement timetable**

Has the meaning given in clause 3.12.1(b).

**intra-regional**

Within a *region*.

**intra-regional loss factor**

A *marginal loss factor* determined according to clause 3.6.2.

**intra-regional losses**

Has the meaning given to it by clause 3.6.2(a).

**~~intra-regional network constraint~~**

~~A *constraint* on part of the *transmission and distribution networks* within a *region* as specified in clause 3.6.4(b).~~

**invoiced amount**

The aggregate of the *settlement statements*, *interim*, *preliminary* or *final*, which at the time of issue of a *call notice* are unpaid by the *Market Participant*, notwithstanding that the usual time for issue or payment of those *settlement statements* has not been reached.

**involuntary load shedding**

*Load shedding* where the *load* shed is not an *interruptible load* except *load* under the control of underfrequency relays as described in clause S5.1.10.1(a), or a *scheduled load*.

**isolation**

Electrical isolation of one part of a communication system from another but where the passage of *electronic data transfer* is not prevented.

### **Jurisdictional System Security Coordinator**

A person appointed by the *Minister* of a *participating jurisdiction* in accordance with section 110 of the *National Electricity Law*.

### **jurisdictional derogation**

Has the meaning given in the *National Electricity Law*. The jurisdictional derogations are included in Chapter 9.

### **jurisdictional electricity legislation**

Has the meaning given to that term in the *National Electricity Law*.

### **jurisdictional metrology material**

Jurisdictional metrology matters that are to be included in the *metrology procedure* for one or more of the *participating jurisdictions* and which is submitted by the *Ministers of the MCE* to *NEMMCO* under clause 7.14.2.

### **Jurisdictional NMI Standing Data schedule**

The schedules described in clause 3.13.12(a), as amended from time to time in accordance with clause 3.13.12(b).

### **Jurisdictional NMI Standing Data suppliers**

*Registered Participants* which are required by the relevant *participating jurisdiction's* legislation or licensing requirements to supply *NMI Standing Data* in respect of *connection points* in that *participating jurisdiction* to *NEMMCO*.

### **Jurisdictional Regulator**

The person authorised by a *participating jurisdiction* to regulate *distribution service* prices in that jurisdiction.

### **lack of reserve (LOR)**

Any of the conditions described in clause 4.8.4(b), (c) or (d).

### **last resort planning power**

The *AEMC's* power to direct a *Registered Participant* under clause 5.6.4(c).

### **last resort planning power guidelines**

The guidelines made by the *AEMC* relating to the exercise of the *last resort planning power* and referred to in clause 5.6.4(o)-(r).

### **load**

A *connection point* or defined set of *connection points* at which electrical power is delivered to a person or to another *network* or the amount of electrical power

delivered at a defined instant at a *connection point*, or aggregated over a defined set of *connection points*.

**load centre**

A geographically concentrated area containing *load* or *loads* with a significant combined consumption capability.

**load class**

A grouping of customers with like *load* characteristics.

**load shedding**

Reducing or disconnecting *load* from the *power system*.

**load shedding procedures**

The procedures developed by *NEMMCO* for each *participating jurisdiction* in accordance with clause 4.3.2(h) for the implementation of the *load shedding* priority and *sensitive load* priority advised by that *Jurisdictional System Security Coordinator* under clauses 4.3.2(f)(1) and (2).

**loading level**

The level of output, consumption or power flow (in MW) of a *generating unit*, *load* or *scheduled network service*.

**loading price**

The price specified for a *price band* and a *trading interval* in a *dispatch offer*, in accordance with clause 3.8.6, for the *dispatch* of a *scheduled generating unit* at a level above its *self-dispatch level*.

**local area/local**

The geographical area allocated to a *Network Service Provider* by the authority responsible for administering the *jurisdictional electricity legislation* in the relevant *participating jurisdiction*.

**local black system procedures**

The procedures, described in clause 4.8.12, applicable to a *local area* as approved by *NEMMCO* from time to time.

**local market ancillary service requirement**

Has the meaning given to it by clause 3.8.1(e2).

**Local Network Service Provider**

Within a *local area*, a *Network Service Provider* to which that geographical area has been allocated by the authority responsible for administering the *jurisdictional electricity legislation* in the relevant *participating jurisdiction*.

### **Local Retailer**

In relation to a *local area*, the *Customer* who is:

1. a business unit or *related body corporate* of the relevant *Local Network Service Provider*; or
2. responsible under the laws of the relevant *participating jurisdiction* for the *supply* of electricity to *franchise customers* in that *local area*; or
3. if neither 1 or 2 is applicable, such other *Customer* as *NEMMCO* may determine.

### **Local Retailer/Market Customer Member**

A *Member* appointed to the *Information Exchange Committee* in that membership category as set out in the *Information Exchange Committee Election Procedures*.

### **local spot price**

A price determined according to clause 3.9.1(c).

### **loss factor**

A multiplier used to describe the *electrical energy loss* for electricity used or transmitted.

### **low reserve**

The conditions described in clause 4.8.4(a).

### **major supply disruption**

The unplanned absence of *voltage* on a part of the *transmission system* affecting one or more *power stations*.

### **mandatory restrictions**

Restrictions imposed by a *participating jurisdiction* by a relevant law, other than the *Rules*, on the use of electricity in a *region*.

### **mandatory restriction period**

The period of *mandatory restrictions*.

### **mandatory restriction schedule**

A schedule prepared in accordance with clause 3.12A.2.

### **marginal electrical energy loss**

The *electrical energy loss* associated with an infinitesimal increment in electricity produced, transported and/or used.

**marginal loss factor**

A multiplier used to describe the *marginal electrical energy loss* for electricity used or transmitted.

**market**

Any of the markets or exchanges described in the *Rules*, for so long as the market or exchange is conducted by *NEMMCO*.

**market ancillary service**

A service identified in clause 3.11.2(a).

**market ancillary service offer**

A notice submitted by an *Ancillary Service Provider* to *NEMMCO* in respect of a *market ancillary service* in accordance with clause 3.8.7A.

**market ancillary service specification**

Has the meaning given in clause 3.11.2(b).

**market ancillary services commencement date**

29 September 2001.

**market auditor**

A person appointed by *NEMMCO* to carry out a *review* under clause 3.13.10(a).

**market commencement**

The date declared as such by *NEMMCO*, on which trading in the *market* commences.

**market connection point**

A *connection point* where any *load* is classified in accordance with Chapter 2 as a *market load* or which *connects* any *market generating unit* to the *national grid*, or where the *network service connected* at that *connection point* is a *market network service*.

**Market Customer**

A *Customer* who has classified any of its *loads* as a *market load* and who is also registered by *NEMMCO* as a *Market Customer* under Chapter 2.

**market customer's additional claim**

Has the meaning given in clause 3.12.2(g)(4).

**market floor price**

A price floor on *regional reference prices* as described in clause 3.9.6.

### **market generating unit**

A *generating unit* whose *sent out generation* is not purchased in its entirety by the *Local Retailer* or by a *Customer* located at the same *connection point* and which has been classified as such in accordance with Chapter 2.

### **Market Generator**

A *Generator* who has classified at least one *generating unit* as a *market generating unit* in accordance with Chapter 2 and who is also registered by NEMMCO as a *Market Generator* under Chapter 2.

### **market information**

Information, other than *confidential information*, concerning the operation of the *spot market* or relating to the operation of, inputs to, or outputs from the *central dispatch* process.

### **market information bulletin board**

A facility established by NEMMCO on the *electronic communication system* for the posting of information which may then be available to *Registered Participants*.

### **market load**

A *load* at a *connection point* the electricity relating to which is purchased other than from the *Local Retailer* and which is classified by the person *connected* at that *connection point* or, with the consent of that person, by some other person, as a *market load* in accordance with Chapter 2. There can be more than one *market load* at any one *connection point*.

### **market management systems**

NEMMCO's *market information* systems and associated communications networks used to support the electronic communication by *Registered Participants* and others connected to or making use of the systems and networks in the operation of the *market*.

### **Market Management Systems Access Procedures**

The procedures to be followed by *Registered Participants* and *Metering Providers* in connecting to and making use of the *market management systems* from time to time published by NEMMCO under clause 3.19.

### **market network service**

A *network service* which is classified as a *market network service* in accordance with clause 2.5.2.

### **Market Network Service Provider**

A *Network Service Provider* who has classified any of its *network services* as a *market network service* in accordance with Chapter 2 and who is also registered by NEMMCO as a *Market Network Service Provider* under Chapter 2.

### **Market Participant**

A person who is registered by NEMMCO as a *Market Generator*, *Market Customer* or *Market Network Service Provider* under Chapter 2.

### **Market Participant registered data**

The data kept on the register in accordance with schedule 5.5.

### **Market Settlement and Transfer Solution Procedures**

The procedures from time to time *published* by NEMMCO under clause 7.2.8 which include those governing the recording of financial responsibility for *energy flows* at a *connection point*, the transfer of that responsibility between *Market Participants* and the recording of *energy flows* at a *connection point*.

### **market suspension**

Suspension of the *market* by NEMMCO in accordance with clause 3.14.3.

### **material inter-network impact**

A material impact on another *Transmission Network Service Provider's network*, which impact may include (without limitation):

- (a) the imposition of *power transfer constraints* within another *Transmission Network Service Provider's network*; or
- (b) an adverse impact on the quality of *supply* in another *Transmission Network Service Provider's network*.

### **materially**

For the purposes of the application of clause 6A.7.3, an event (other than a *network support event*) results in a *Transmission Network Service Provider* incurring materially higher or materially lower costs if the change in costs (as opposed to the revenue impact) that the *Transmission Network Service Provider* has incurred and is likely to incur in any *regulatory year* of the *regulatory control period*, as a result of that event, exceeds 1% of the *maximum allowed revenue* for the *Transmission Network Service Provider* for that *regulatory year*. In other contexts, the word has its ordinary meaning.

### **maximum allowed revenue**

For a *Transmission Network Service Provider* for a *regulatory year* of a *regulatory control period*, the amount calculated as such in accordance with rule 6A.3.

**maximum credit limit**

In relation to a *Market Participant* a credit limit determined by *NEMMCO* for that *Market Participant* in accordance with clause 3.3.8.

**maximum demand**

The highest amount of electrical power delivered, or forecast to be delivered, over a defined period (*day*, week, month, season or year) either at a *connection point*, or simultaneously at a defined set of *connection points*.

**maximum power input (MPI)**

The largest single *supply* input to a particular location or *region*, typically the output of the largest single *generating unit* or group of *generating units* or the highest *power transfer* of a single *transmission line* or *interconnection*.

**maximum ramp rate**

The *maximum ramp rate* that an item of equipment is capable of achieving in normal circumstances. This may be:

- (a) as specified by the manufacturer; or
- (b) as independently certified from time to time to reflect changes in the physical capabilities of the equipment.

**maximum total payment**

The amount determined in accordance with clause 3.15.22.

**measurement element**

An energy measuring component which converts the flow of electricity in a power conductor into an electronic signal and / or a mechanically recorded electrical measurement.

**medium term capacity reserve**

At any time, the amount of surplus generating capacity indicated by the relevant *Generators* as being available for a particular period, being more than 7 *days* in the future but not more than 12 weeks, and which is assessed as being in excess of the capacity requirement to meet the forecast *load* demand, taking into account the known or historical levels of demand management.

**medium term capacity reserve standard**

The level of *medium term capacity reserves* required for a particular period as set out in the *power system security and reliability standards*.



**medium-term PASA**

The PASA in respect of the period from the 8<sup>th</sup> *day* after the current *trading day* to 24 months after the current *trading day* in accordance with clause 3.7.2.

**Member**

A person appointed to the *Information Exchange Committee* pursuant to the *Information Exchange Committee Election Procedures*, and includes all membership categories, unless a contrary intention appears.

**meter**

A device complying with *Australian Standards* which measures and records the production or consumption of electrical *energy*.

**metering**

Recording the production or consumption of electrical *energy*.

**metering data**

The data obtained from a *metering installation*, the processed data or substituted data.

**metering database**

A database of *metering data* and *settlements ready data* maintained and administered by *NEMMCO* in accordance with clause 7.9.

**metering installation**

The assembly of components and/or processes that are controlled for the purpose of metrology and which lie between the *metering point(s)* or *unmetered connection point* and the point of connection to the *telecommunications network*, as shown in schedule 7.1.

[**Note:** The assembly of components may include the combination of several metering points to derive the metering data for a connection point. The metering installation must be classified as a revenue metering installation and/or a check metering installation.]

**metering point**

The point of physical connection of the device measuring the current in the power conductor.

**Metering Provider**

A person who meets the requirements listed in schedule 7.4 and has been accredited by and registered by *NEMMCO* as a Metering Provider.

**metering register**

A register of information associated with a *metering installation* as required by schedule 7.5.

**metering system**

The collection of all components and arrangements installed or existing between each *metering point* and the *metering database*, as shown in schedule 7.1 .

**metrology procedure**

The procedure developed and published by *NEMMCO* in accordance with rule 7.14.

**minimum access standard**

In relation to a technical requirement of access, a standard of performance, identified in a schedule of Chapter 5 as a minimum access standard for that technical requirement, such that a *plant* that does not meet that standard will be denied access because of that technical requirement.

**minimum technical ancillary service standards**

The minimum technical service standards prepared by *NEMMCO* in accordance with clause 3.11.4.

**Minister**

A Minister that is a “Minister” under the *National Electricity Law*.

**Minister of (a, that, another, or other, etc) participating jurisdiction**

Has the same meaning as Minister of a participating jurisdiction has in the *National Electricity Law*.

**Ministers of the MCE**

*Ministers of the participating jurisdictions* acting as the MCE where MCE has the same meaning as in the *National Electricity Law*.

**[mis-pricing](#)**

[For a particular \*network\* node within a nominated \*region\*, the difference between:](#)

(a) the regional reference price for the region; and

(b) an estimate of the marginal value of supply at the network node, which marginal value is determined as the price of meeting an incremental change in load at that network node.

**monitoring equipment**

The testing instruments and devices used to record the performance of *plant* for comparison with expected performance.

**month**

Unless otherwise specified, the period beginning at 4.30 am on the relevant commencement date and ending at 4.30 am on the date in the next calendar month corresponding to the commencement date of the period.

**nameplate rating**

The maximum continuous output or consumption in MW of an item of equipment as specified by the manufacturer, or as subsequently modified.

**NATA**

National Association of Testing Authorities.

**National Electricity Code**

Has the same meaning as in the *National Electricity Law*.

**National Electricity Law**

The National Electricity Law set out in the schedule to the National Electricity (South Australia) Act 1996 (SA) and applied in each of the *participating jurisdictions*.

**National Electricity Market**

Has the same meaning as in the *National Electricity Law*.

**national electricity objective**

The objective stated in section 7 of the Law.

**national grid**

The sum of all *connected transmission systems* and *distribution systems* within the *participating jurisdictions*.

**National Measurement Act**

The National Measurement Act 1960 of the Commonwealth as amended from time to time.

**national transmission flow path**

That portion of a *transmission network* or *transmission networks* used to transport significant amounts of electricity between *generation centres* and *load centres*.

**NCAS**

*A network control ancillary service.*

**negative change event**

For a *Transmission Network Service Provider*, a *pass through event* which entails the *Transmission Network Service Provider* incurring *materially* lower costs in providing *prescribed transmission services* than it would have incurred but for that event.

For a *Distribution Network Service Provider*, a *pass through event* that materially reduces the costs of providing *direct control services*.

**negative network support event**

*A network support event* which entails a *Transmission Network Service Provider* making lower *network support payments* in the preceding *regulatory year* than the amount of *network support payments* (if any) that is provided for in the *annual building block revenue requirement* for the provider for that *regulatory year*.

**negative pass through amount**

In respect of a *negative change event* for a *Transmission Network Service Provider*, an amount that is not greater than a *required pass through amount* as determined by the *AER* under clause 6A.7.3(g).

In respect of a *negative change event* for a *Distribution Network Service Provider*, an amount that is not greater than a *required pass through amount* as determined by the *AER* under clause 6.6.1(g).

**negotiable service**

- (a) In relation to *transmission services* means *negotiated transmission services*.
- (b) In relation to *distribution services* means *negotiated distribution services*.

**negotiated access standard**

In relation to a technical requirement of access for a particular *plant*, an agreed standard of performance determined in accordance with clause 5.3.4A and identified as a negotiated access standard for that technical requirement in a *connection agreement*.

**negotiated distribution service**

*A distribution service* that is a *negotiated network service* within the meaning of section 2C of the Law;

### **Negotiated Distribution Service Criteria**

The criteria specified in a distribution determination in accordance with clause 6.7.4.

### **Negotiated Distribution Service Principles**

The principles set out in clause 6.7.1.

### **negotiated transmission service**

Any of the following services:

- (a) a *shared transmission service* that:
  - (1) exceeds the *network* performance requirements (whether as to quality or quantity) (if any) as that *shared transmission service* is required to meet under any *jurisdictional electricity legislation*; or
  - (2) except to the extent that the *network* performance requirements which that *shared transmission service* is required to meet are prescribed under any *jurisdictional electricity legislation*, exceeds or does not meet the *network* performance requirements (whether as to quality or quantity) as are set out in schedule 5.1a or 5.1;
- (b) *connection services* that are provided to serve a *Transmission Network User*, or group of *Transmission Network Users*, at a single *transmission network connection point*, other than *connection services* that are provided by one *Network Service Provider* to another *Network Service Provider* to connect their *networks* where neither of the *Network Service Providers* is a *Market Network Service Provider*; or
- (c) *use of system services* provided to a *Transmission Network User* and referred to in rule 5.4A(f)(3) in relation to *augmentations* or *extensions* required to be undertaken on a *transmission network* as described in rule 5.4A,

but does not include an *above-standard system shared transmission service* or a *market network service*.

### **Negotiated Transmission Service Criteria**

For a *Transmission Network Service Provider* under a *transmission determination*, the criteria set out in that *transmission determination* pursuant to clause 6A.9.4.

### **Negotiated Transmission Service Principles**

The principles set out in clause 6A.9.1.

### **negotiated use of system service**

A *use of system service* in respect of which:

- (a) a *Connection Applicant* may negotiate with a *Transmission Network Service Provider*;
- (b) an *Embedded Generator* may negotiate with a *Distribution Network Service Provider*; or
- (c) a *Market Network Service Provider* may negotiate with a *Distribution Network Service Provider*,

in accordance with clauses 5.4A(f)(3) or 5.5(f)(3).

**negotiated use of system charges**

The charges described in clauses 5.4A(f)(3) or 5.5(f)(3).

**negotiating framework**

For a *Transmission Network Service Provider*, the negotiating framework approved or included by the *AER* for that *Transmission Network Service Provider* in a final decision under clause 6A.14.1(6).

For a *Distribution Network Service Provider*, a negotiating framework as approved or substituted by the *AER* in its final decision under clause 6.12.1(15).

**NEM**

The *National Electricity Market*.

**NEMMCO**

National Electricity Market Management Company Limited A.C.N. 072 010 327.

**NEMMCO co-ordinating centre**

The control centre from which *NEMMCO* conducts *market* related activities and the coordination of the operation of the *national grid*.

**NEMMCO intervention event**

An event where *NEMMCO* intervenes in the *market* under the *Rules* by:

- (a) issuing a *direction* in accordance with clause 4.8.9; or
- (b) exercising the *reliability and emergency reserve trader* in accordance with rule 3.20 by:
  - (1) *dispatching scheduled generating units, scheduled network services or scheduled loads* in accordance with a *scheduled reserve contract*; or
  - (2) *activating loads or generating units* under an *unscheduled reserve contract*.

### ***NEMMCO* power system security responsibilities**

The responsibilities described in clause 4.3.1.

### **network**

The apparatus, equipment, plant and buildings used to convey, and control the conveyance of, electricity to customers (whether wholesale or retail) excluding any *connection assets*. In relation to a *Network Service Provider*, a *network* owned, operated or controlled by that *Network Service Provider*.

### **network capability**

The capability of the *network* or part of the *network* to transfer electricity from one location to another.

### **network connection**

The formation of a physical link between the *facilities* of two *Registered Participants* or a *Registered Participant* and a customer being a *connection* to a *transmission* or *distribution network* via *connection assets*.

### **network constraint**

A *constraint* on a *transmission network* or *distribution network*.

### **network control ancillary service**

A service identified in clause 3.11.4(a) which provides *NEMMCO* with a capability to control the real or *reactive power flow* into or out of a *transmission network* in order to:

- (a) maintain the *transmission network* within its current, *voltage*, or stability limits following a *credible contingency event*; or
- (b) enhance the value of *spot market* trading in conjunction with the *central dispatch* process.

### **network coupling point**

The point at which *connection assets* join a *distribution network*, used to identify the *distribution service* price payable by a *Customer*.

### **network dispatch offer**

An notice submitted by a *Scheduled Network Service Provider* to *NEMMCO* relating to the *dispatch* of a *scheduled network service* in accordance with clause 3.8.6A.

### **network element**

A single identifiable major component of a *transmission system* or *distribution system* involving:

- (a) an individual *transmission* or *distribution* circuit or a phase of that circuit;  
or
- (b) a major item of apparatus or equipment associated with the function or operation of a *transmission line*, *distribution line* or an associated *substation* or *switchyard* which may include *transformers*, circuit breakers, *reactive plant* and *monitoring equipment* and control equipment.

### **network loop**

A set of *network elements* that are *connected* together in the form of a closed path, that is in such a way that by progressing from each element to the next it is possible to return to the starting point.

### **network losses**

*Energy losses* incurred in the transfer of electricity over a *transmission network* or *distribution network*.

### **network service**

*Transmission service* or *distribution service* associated with the conveyance, and controlling the conveyance, of electricity through the *network*.

### **Network Service Provider**

A person who engages in the activity of owning, controlling or operating a *transmission or distribution system* and who is registered by *NEMMCO* as a *Network Service Provider* under Chapter 2.

### **network service provider performance report**

A report prepared by the *AER* under section 28V of the Law.

### **[network support agreement](#)**

[An agreement between a \*Network Service Provider\* and a \*Market Participant\* to improve \*network capability\* by providing a non-network alternative to a \*network augmentation\*.](#)

### **network support event**

- (a) If, at the end of a *regulatory year* of a *regulatory control period*, the amount of *network support payments* made by a *Transmission Network Service Provider* for that previous *regulatory year* is higher or lower than the amount of *network support payments* (if any) that is provided for in the *annual building block revenue requirement* for the *Transmission Network Service Provider* for that *regulatory year*, this constitutes a *network support event*.
- (b) In calculating the amount for the purposes of a *network support event* referred to in paragraph (a), the amount of *network support payments* made



by a *Transmission Network Service Provider* must not include an amount of *network support payments* that are a substitute for a *network augmentation* where an allowance for capital expenditure in relation to that *network augmentation* has been provided for in the *revenue determination*.

**network support pass through amount**

The amount that should be passed through to *Transmission Network Users* in the *regulatory year* following the preceding *regulatory year*, in respect of a *network support event* for a *Transmission Network Service Provider*.

**network support payment**

A payment by a *Transmission Network Service Provider* to:

- (a) any *Generator* providing *network support services* in accordance with clause 5.6.2; or
- (b) any other person providing a *network support service* that is an alternative to *network augmentation*.

**Network User**

A *Generator*, a *Transmission Customer*, a *Distribution Customer* or a *Market Network Service Provider*.

**new distribution network investment**

Investment in a *new large distribution network asset* or a *new small distribution network asset*.

**new large distribution network asset**

An asset of a *Distribution Network Service Provider* which is an *augmentation* and in relation to which the *Distribution Network Service Provider* has estimated it will be required to invest a total capitalised expenditure in excess of \$10 million, unless the *AER* publishes a requirement that a *new large distribution network asset* is to be distinguished from a *new small distribution network asset* if it involves investment of a total capitalised expenditure in excess of another amount, or satisfaction of another criterion. Where such a specification has been made, an asset must require total capitalised expenditure in excess of that amount or satisfaction of those other criteria to be a *new large distribution network asset*.

**new large network asset**

A *new large distribution network asset* or a *new large transmission network asset*.

**new large transmission network asset**

An asset of a *Transmission Network Service Provider* which is an *augmentation* and in relation to which the *Transmission Network Service Provider* has estimated it will be required to invest a total capitalised expenditure in excess of \$20 million

(as varied in accordance with a *total capitalised expenditure threshold determination*).

**new network investment**

*New distribution network investment or new transmission network investment.*

**new small distribution network asset**

An asset of a *Distribution Network Service Provider* which is an *augmentation* and:

- (a) in relation to which the *Distribution Network Service Provider* has estimated it will be required to invest a total capitalised expenditure in excess of \$1 million, unless the *AER* publishes a requirement that an asset will be a *new small distribution network asset* if it involves investment of a total capitalised expenditure in excess of another amount, or satisfaction of another criterion. Where such specification has been made, an asset must require total capitalised expenditure in excess of that amount or satisfaction of those other criteria to be a *new small distribution network asset*; and
- (b) is not a *new large distribution network asset*.

**new small network asset**

*A new small distribution network asset or a new small transmission network asset.*

**new small transmission network asset**

An asset of a *Transmission Network Service Provider* which is an *augmentation* and:

- (a) in relation to which the *Transmission Network Service Provider* has estimated it will be required to invest a total capitalised expenditure in excess of \$5 million (as varied in accordance with a *total capitalised expenditure threshold determination*); and
- (b) is not a *new large transmission network asset*.

**new transmission network investment**

Investment in a *new large transmission network asset* or a *new small transmission network asset*.

**NMAS**

*A non-market ancillary service.*

**NMI**

A National Metering Identifier as described in clause 7.3.1(d).

### **NMI Standing Data**

The following data in respect of a *connection point*:

- (a) the *NMI* of the *connection point* and the street address of the relevant *connection point* to which that *NMI* is referable;
- (b) the *NMI* checksum for the *connection point*;
- (c) the identity of the *Local Network Service Provider*;
- (d) the code (known as a *TNI*) identifying the relevant *transmission node* which identifies the *transmission loss factor* and/or *transmission use of system* charge for the *connection point*;
- (e) the relevant *distribution loss factor* applicable to the *connection point*;
- (f) the Network Tariff (identified by a code) applicable in respect of the *connection point*;
- (g) the *NMI* classification code (as set out in the *Market Settlement and Transfer Solution Procedures*) of the *connection point*;
- (h) the read cycle date, or date of next scheduled read or date in a relevant code representing the read cycle date or date of next scheduled read, for that *connection point*;
- (i) the profile type applicable to the *connection point*; and
- (j) such other categories of data as may be referred to in the *Market Settlement and Transfer Solution Procedures* as forming *NMI Standing Data*,

and, for the avoidance of doubt, does not include any *metering data* or other details of an end-user's consumption at that *connection point*.

### **nomenclature standards**

The standards approved by *NEMMCO* in conjunction with the *Network Service Providers* relating to numbering, terminology and abbreviations used for information transfer between *Registered Participants* as provided for in clause 4.12.

### **nominal voltage**

The design *voltage* level, nominated for a particular location on the *power system*, such that power lines and circuits that are electrically connected other than through transformers have the same *nominal voltage* regardless of operating *voltage* and *normal voltage*.

**non-credible contingency event**

An event described in clause 4.2.3(e).

**non-market ancillary service**

*Network control ancillary services and system restart ancillary services.*

**non-market generating unit**

A *generating unit* whose *sent out generation* is purchased in its entirety by the *Local Retailer* or by a *Customer* located at the same *connection point* and which has been classified as such in accordance with Chapter 2.

**Non-Market Generator**

A *Generator* who has classified a *generating unit* as a *non-market generating unit* in accordance with Chapter 2.

**Non-Registered Customer**

A person who:

1. purchases electricity through a *connection point* with the *national grid* other than from the *spot market*; and
2. is eligible to be registered by *NEMMCO* as a *Customer* and to classify the *load* described in (1) as a *first-tier load* or a *second-tier load*, but is not so registered.

**non-regulated transmission services**

A *transmission service* that is neither a *prescribed transmission service* nor a *negotiated transmission service*.

**non-scheduled generating unit**

A *generating unit* so classified in accordance with Chapter 2.

**non-scheduled generating system**

A *generating system* comprising *non-scheduled generating units*.

**Non-Scheduled Generator**

A *Generator* in respect of which any *generating unit* is classified as a *non-scheduled generating unit* in accordance with Chapter 2.

**non-scheduled load**

A *market load* which is not a *scheduled load*.

**non semi-dispatch interval**

For a *semi-scheduled generating unit*, a *dispatch interval* other than a *semi-dispatch interval*.

**normal operating frequency band**

In relation to the *frequency* of the *power system*, means the range 49.9Hz to 50.1Hz or such other range so specified in the *power system security and reliability standards*.

**normal operating frequency excursion band**

In relation to the *frequency* of the *power system*, means the range specified as being acceptable for infrequent and momentary excursions of *frequency* outside the *normal operating frequency band*, being the range of 49.75 Hz to 50.25 Hz or such other range so specified in the *power system security and reliability standards*.

**normal voltage**

In respect of a *connection point*, its *nominal voltage* or such other *voltage* up to 10% higher or lower than *nominal voltage*, as approved by NEMMCO, for that *connection point* at the request of the *Network Service Provider* who provides *connection* to the *power system*.

**normally off**

Describes a *scheduled load* which, unless *dispatched* in accordance with its *dispatch bid*, and in accordance with clause 3.8.7(j), should be considered as being switched off.

**normally on**

Describes a *scheduled load* which, unless *dispatched* in accordance with its *dispatch bid*, and in accordance with clause 3.8.7(i), should be considered as being switched on.

**off-loading price**

The price specified for a *price band* and a *trading interval* in a *dispatch offer*, in accordance with clause 3.8.6, for the *off-loading* of a *scheduled generating unit* below its *self-dispatch level*.

**off-loading price band**

A *price band* submitted for *off-loading* below a *self-dispatch level* for a *trading interval* in a *dispatch offer*.

**off-loading, off-load**

The reduction in electricity output or consumption.

**operating expenditure criteria**

For a *Transmission Network Service Provider* – the matters listed in clause 6A.6.6(c)(1)–(3).

For a *Distribution Network Service Provider* – the matters listed in clause 6.5.6(c)(1)–(3).

**operating expenditure factors**

For a *Transmission Network Service Provider* – the factors listed in clause 6A.6.6(e)(1)–(10).

For a *Distribution Network Service Provider* – the factors listed in clause 6.5.6(e)(1)–(10).

**operating expenditure objectives**

For a *Transmission Network Service Provider* – the objectives set out in clause 6A.6.6(a).

For a *Distribution Network Service Provider* – the objectives set out in clause 6.5.6(a).

**operational communication**

A communication concerning the arrangements for, or actual operation of, the *power system* in accordance with the *Rules*.

**operational frequency tolerance band**

The range of *frequency* within which the *power system* is to be operated to cater for the occurrence of a *contingency event* as specified in the *power system security and reliability standards*.

**outage**

Any full or partial unavailability of equipment or *facility*.

**outstandings**

In relation to a *Market Participant*, the dollar amount determined by the formula in clause 3.3.9.

**over-recovery amount**

Any amount by which the revenue earned from the provision of *prescribed transmission services* in previous *financial years* exceeds the sum of the *AARR* in those *financial years*, grossed up by the application of an annual interest rate approved by the *AER* for this purpose.

**Participant compensation fund**

The fund of that name referred to in clause 3.16.

**participant derogation**

Has the meaning given in the *National Electricity Law*. The participant derogations are included in Chapter 8A.

**Participant fees**

The fees payable by *Registered Participants* described in clause 2.11.

**participating jurisdiction**

A jurisdiction that is a “participating jurisdiction” under the *National Electricity Law*.

**PASA availability**

The *physical plant capability* of a *scheduled generating unit*, *scheduled load* or *scheduled network service*, including any capability that can be made available within 24 hours.

**pass through event**

Any of the following is a pass through event:

- (a) a regulatory change event;
- (b) a service standard event;
- (c) a tax change event;
- (d) a terrorism event.

An *insurance event* is a pass through event for a *transmission determination* (in addition to those listed above).

An event nominated in a distribution determination as a pass through event is a pass through event for the determination (in addition to those listed above).

**payment date**

The 20<sup>th</sup> *business day* after the end of a *billing period*.

**payment period**

The typical period between trading and payment defined in schedule 3.3.

**peak load**

Maximum *load*.

### **performance incentive scheme parameters**

For a *service target performance incentive scheme*, those parameters that are *published* by the AER in respect of that scheme pursuant to clause 6A.7.4(c).

### **performance standard**

A standard of performance that:

- (a) is established as a result of it being taken to be an applicable performance standard in accordance with clause 5.3.4A(i); or
- (b) is included in the register of *performance standards* established and maintained by NEMMCO under rule 4.14(n),

as the case may be.

### **performance standards commencement date**

For:

- (a) *Generators, Customers and Network Service Providers* who plan, own, operate or control a *facility* located in a *participating jurisdiction* (other than Tasmania), the *performance standards commencement date* is, in relation to that *facility*, 16 November 2003; and
- (b) *Generators, Customers and Network Service Providers* who plan, own, operate or control a *facility* located in Tasmania, the *performance standards commencement date* is, in relation to that *facility*, the date that Tasmania becomes a *participating jurisdiction*.

### **physical plant capability**

The maximum MW output or consumption which an item of electrical equipment is capable of achieving for a given period.

### **planned network event**

An event which has been planned by a *Transmission Network Service Provider, NEMMCO* or a *Market Participant* that is likely to materially affect *network constraints* in relation to a *transmission system*, including but not limited to:

- (a) a *network outage*;
- (b) the *connection or disconnection of generating units or load*;
- (c) the *commissioning or decommissioning of a network asset or the provision of new or modified network control ancillary services*; and
- (d) the *provision of services under a network support agreement*.



## **plant**

In relation to a *connection point*, includes all equipment involved in generating, utilising or transmitting electrical *energy*.

In relation to *dispatch bids and offers*, controllable generating equipment and controllable *loads*.

In relation to the *statement of opportunities* prepared by *NEMMCO*, individually controllable generating facilities registered or capable of being registered with *NEMMCO*.

## **plant availability**

The *active power capability* of a *generating unit* (in MW), based on the availability of its electrical power conversion process and assuming no fuel supply limitations on the *energy* available for input to that electrical power conversion process.

## **plant standard**

An Australian or international standard or a part thereof that:

- (a) the *Reliability Panel* determines to be an acceptable alternative to a particular *minimum access standard* or *automatic access standard* for a particular class of *plant*, or
- (b) a schedule in Chapter 5 establishes as an acceptable alternative to a particular *minimum access standard* or *automatic access standard* for a particular class of *plant*.

## **positive change event**

For a *Transmission Network Service Provider*, a *pass through event* which entails the *Transmission Network Service Provider* incurring *materially* higher costs in providing *prescribed transmission services* than it would have incurred but for that event, but does not include a *contingent project* or an associated *trigger event*.

For a *Distribution Network Service Provider*, a *pass through event* that *materially* increases the costs of providing *direct control services*.

## **positive network support event**

A *network support event* which entails a *Transmission Network Service Provider* making higher *network support payments* in the preceding *regulatory year* than the amount of *network support payments* (if any) that is provided for in the *annual building block revenue requirement* for the provider for that *regulatory year*.

## **positive pass through amount**

For a *Transmission Network Service Provider*, an amount (not exceeding the *eligible pass through amount*) proposed by the provider under clause 6A.7.3(c).

For a *Distribution Network Service Provider*, an amount (not exceeding the *eligible pass through amount*) proposed by the provider under clause 6.6.1(c).

**postage stamp basis**

A system of charging *Network Users* for *transmission service* or *distribution service* in which the price per unit is the same regardless of how much *energy* is used by the *Network User* or the location in the *transmission network* or *distribution network* of the *Network User*.

**post-tax revenue model**

For a *Transmission Network Service Provider*, the model prepared and *published* by the *AER* in accordance with clause 6A.5.1.

For a *Distribution Network Service Provider*, the model prepared and *published* by the *AER* in accordance with clause 6.4.1.

**potential transmission project**

*New transmission network investment* identified by the *AEMC* which, in the opinion of the *AEMC*, is likely, if constructed, to relieve forecast *constraints* in respect of *national transmission flow paths* between *regional reference nodes*.

**potential value**

In relation to a *transaction* for a *Market Participant*, the dollar amount determined by the procedure in clause 3.3.14.

**power factor**

The ratio of the *active power* to the *apparent power* at a *metering point*.

**power station**

In relation to a *Generator*, a *facility* in which any of that *Generator's generating units* are located.

**power system**

The electricity power system of the *national grid* including associated *generation* and *transmission* and *distribution networks* for the *supply* of electricity, operated as an integrated arrangement.

**power system damping**

The rate at which disturbances to the *satisfactory operating state* reduce in magnitude.

**power system demand**

The total *load* (in MW) supplied by the *power system*.

**power system operating procedures**

The procedures to be followed by *Registered Participants* in carrying out operations and/or maintenance activities on or in relation to primary and *secondary equipment connected* to or forming part of the *power system* or *connection points*, as described in clause 4.10.1.

**power system reserve constraint**

A *constraint* in the *central dispatch* due to the need to provide or maintain a specified type and level of *scheduled reserve*.

**power system security**

The safe scheduling, operation and control of the *power system* on a continuous basis in accordance with the principles set out in clause 4.2.6.

**power system security and reliability standards**

The standards (other than the *system restart standard*) governing *power system security* and *reliability* of the *power system* to be approved by the *Reliability Panel* on the advice of *NEMMCO*, but which may include but are not limited to standards for the *frequency* of the *power system* in operation, *contingency capacity reserves* (including guidelines for assessing requirements), *short term capacity reserves* and *medium term capacity reserves*.

**power transfer**

The instantaneous rate at which *active energy* is transferred between *connection points*.

**power transfer capability**

The maximum permitted *power transfer* through a *transmission* or *distribution network* or part thereof.

**pre-dispatch**

Forecast of *dispatch* performed one *day* before the *trading day* on which *dispatch* is scheduled to occur.

**pre-dispatch schedule**

A schedule prepared in accordance with clause 3.8.20(a).

**preliminary program**

The program to be prepared by a *Network Service Provider* showing proposed milestones for *connection* and access activities as specified in clause 5.3.3(b)(6).

**preliminary statement**

Has the meaning given in clause 3.15.14(a).

**prescribed common transmission services**

*Prescribed transmission services* that provide equivalent benefits to all *Transmission Customers* who have a *connection point* with the relevant *transmission network* without any differentiation based on their location within the *transmission system*.

**prescribed entry services**

*Entry services* that are *prescribed transmission services* by virtue of the operation of clause 11.6.11.

**prescribed exit services**

*Exit services* that are *prescribed transmission services* by virtue of the operation of clause 11.6.11 and *exit services* provided to *Distribution Network Service Providers*.

**prescribed transmission service**

Any of the following services:

- (a) a *shared transmission service* that:
  - (1) does not exceed such *network* performance requirements (whether as to quality or quantity) as that *shared transmission service* is required to meet under any *jurisdictional electricity legislation*;
  - (2) except to the extent that the *network* performance requirements which that *shared transmission service* is required to meet are prescribed under any *jurisdictional electricity legislation*, does not exceed such *network* performance requirements (whether as to quality or quantity) as are set out in schedule 5.1a or 5.1; or
  - (3) is an *above-standard system shared transmission service*;
- (b) services that are required to be provided by a *Transmission Network Service Provider* under the *Rules*, or in accordance with *jurisdictional electricity legislation*, to the extent such services relate to the provision of the services referred to in paragraph (a), including such of those services as are:
  - (1) required by *NEMMCO* to be provided under the *Rules*; and
  - (2) necessary to ensure the integrity of a *transmission network*, including through the maintenance of *power system security* and assisting in the planning of the *power system*; or
- (c) *connection services* that are provided by a *Transmission Network Service Provider* to another *Network Service Provider* to connect their *networks* where neither of the *Network Service Providers* is a *Market Network Service Provider*;

but does not include a *negotiated transmission service* or a *market network service*.

**prescribed TUOS services or prescribed transmission use of system services;**

*Prescribed transmission services* that:

- (a) provide different benefits to *Transmission Customers* who have a *connection point* with the relevant *transmission network* depending on their location within the *transmission system*; and
- (b) are not *prescribed common transmission services*, *prescribed entry services* or *prescribed exit services*.

**price band**

A MW quantity specified in a *dispatch bid*, *dispatch offer* or *market ancillary service offer* as being available for *dispatch* at a specified price.

**pricing methodology**

For a *Transmission Network Service Provider*, means the pricing methodology approved by the *AER* for that *Transmission Network Service Provider* and included in a *transmission determination* as referred to in rule 6A.24.

**pricing methodology guidelines**

Guidelines made by the *AER* under rule 6A.25 that contain the matters set out in clause 6A.25.2.

**Pricing Principles for Prescribed Transmission Services**

The principles set out in rule 6A.23.

**pricing proposal**

A pricing proposal under Part I of Chapter 6.

**pricing zone**

A geographic area within which *Network Users* are charged a specific set of *distribution service* prices.

**primary restart service**

A *system restart ancillary service* that meets the technical and availability requirements of a *primary restart service* specified by *NEMMCO* under clause 3.11.4A(d).

**profile**

*Energy data* or costs for a period longer than a *trading interval* allocated into *trading intervals*.

**projected assessment of system adequacy process (“PASA”)**

The medium term and short term processes described in clause 3.7 to be administered by *NEMMCO*.

**Proponent**

In respect of clause 5.7.7 has the meaning given in clause 5.7.7(a).

**proposed contingent capital expenditure**

The total forecast capital expenditure for the relevant *proposed contingent project*, as included in the *Revenue Proposal* for that project.

**proposed contingent project**

A proposal by a *Transmission Network Service Provider* as part of a *Revenue Proposal* for a project to be determined by the *AER* as a *contingent project* for the purposes of a *revenue determination* in accordance with clause 6A.8.1(b).

**prospective reallocation**

A *reallocation transaction* that occurs in a *trading interval* that takes place at a time after the *reallocation request* is made.

**protection system**

A system, which includes equipment, used to protect a *Registered Participant’s facilities* from damage due to an electrical or mechanical fault or due to certain conditions of the *power system*.

**prudential margin**

A dollar amount to be determined by *NEMMCO* in accordance with clause 3.3.8.

**prudential requirements**

The requirements which must be satisfied as a condition of eligibility to remain a *Market Participant* in accordance with clause 3.3.

**publish/publication**

A document is published by the *AER* if it is:

- (a) published on the *AER's* website; and
- (b) made available for public inspection at the *AER's* public offices; and
- (c) in the case of a document inviting submissions from members of the public – published in a newspaper circulating generally throughout Australia.

A document is published by someone else if it is made available to *Registered Participants* electronically.

**ramp rate**

The rate of change of *active power* (expressed as MW/minute) required for *dispatch*.

**rated active power**

- (1) In relation to a *generating unit*, the maximum amount of *active power* that the *generating unit* can continuously deliver at the *connection point* when operating at its *nameplate rating*.
- (2) In relation to a *generating system*, the combined maximum amount of *active power* that its in-service *generating units* can deliver at the *connection point*, when its in-service *generating units* are operating at their *nameplate ratings*.

**reaction period**

The estimated period of time taken to remove defaulting *Market Participants* from the *market* as defined in schedule 3.3.

**reactive energy**

A measure, in varhour–(varh), of the alternating exchange of stored energy in inductors and capacitors, which is the time-integral of the product of *voltage* and the out-of-phase component of current flow across a *connection point*.

**reactive plant**

*Plant* which is normally specifically provided to be capable of providing or absorbing *reactive power* and includes the *plant* identified in clause 4.5.1(g).

**reactive power**

The rate at which *reactive energy* is transferred.

*Reactive power* is a necessary component of alternating current electricity which is separate from *active power* and is predominantly consumed in the creation of magnetic fields in motors and *transformers* and produced by *plant* such as:

- (a) alternating current generators;
- (b) capacitors, including the capacitive effect of parallel *transmission* wires; and
- (c) *synchronous condensers*.

**reactive power capability**

The maximum rate at which *reactive energy* may be transferred from a *generating unit* to a *connection point* as specified or proposed to be specified in a *connection agreement* (as the case may be).

**reactive power reserve**

Unutilised sources of *reactive power* arranged to be available to cater for the possibility of the unavailability of another source of *reactive power* or increased requirements for *reactive power*.

**reactive power support/reactive support**

The provision of *reactive power*.

**reactor**

A device, similar to a *transformer*, specifically arranged to be *connected* into the *transmission system* during periods of low *load* demand or low *reactive power* demand to counteract the natural capacitive effects of long *transmission lines* in generating excess *reactive power* and so correct any *transmission voltage* effects during these periods.

**reallocation**

A process under which two *Market Participants* request *NEMMCO* to make matching debits and credits to the position of those *Market Participants* with *NEMMCO*.

**reallocation amount**

In respect of a *Market Participant*, the positive or negative dollar amount in respect of a *reallocation transaction* being an amount payable to or by the *Market Participant*.

**reallocation procedures**

The procedures *published* by *NEMMCO* under clause 3.15.11A.

**reallocation request**

A request to *NEMMCO* for a *reallocation*, pursuant to clause 3.15.11(c).

**reallocation transaction**

A *transaction* which occurs when the applicable *trading interval* specified in a *reallocation request* occurs and the *reallocation request* has been registered and not deregistered before the expiration of the *trading interval*.

**Reallocator**

A person registered as a Reallocator by *NEMMCO* in accordance with rule 2.5B.

**reasonable worst case**

A position that, while not being impossible, is to a probability level that the estimate would not be exceeded more than once in 48 months.



**rebid**

A variation to a bid or offer made in accordance with clause 3.8.22.

**reduced payment period request**

A written request to *NEMMCO* for the purpose of schedule 3.3, paragraph VI(C).

**Referred Affected Participant**

An *Affected Participant* who has a claim referred to an independent expert pursuant to clauses 3.12.2(l) or 3.12.2(m).

**Referred Directed Participant**

A *Directed Participant* who has a claim referred to an independent expert pursuant to clauses 3.15.7B(c) or 3.15.7B(d).

**Referred Market Customer**

A *Market Customer* who has a claim referred to an independent expert pursuant to clauses 3.12.2(l) or 3.12.2(m).

**region, regional**

An area determined by the *AEMC* in accordance with Chapter 2A, being an area served by a particular part of the *transmission network* containing one or more major *load centres* or *generation centres* or both.

**regional benefit directions procedures**

Has the meaning given in clause 3.15.8(b2).

**regional reference node**

A location on a *transmission* or *distribution network* to be determined for each *region* by the *AEMC* in accordance with Chapter 2A.

**regional reference price**

*Spot price* at the *regional reference node*.

**regional specific power system operating procedures**

The procedures described in clause 4.10.1(a)(3).

**Regions Publication**

The document *published* by *NEMMCO* under clause 2A.1.3 that provides a list of all *regions*, *regional reference nodes* and the *region* to which each *market connection point* is assigned.

**registered bid and offer data**

Data submitted by *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* to *NEMMCO* in relation to their *scheduled loads*, *scheduled generating units*, *semi-scheduled generating units* and *scheduled market network services* in accordance with schedule 3.1.

**Registered Participant**

A person who is registered by *NEMMCO* in any one or more of the categories listed in clauses 2.2 to 2.7 (in the case of a person who is registered by *NEMMCO* as a *Trader*, such a person is only a *Registered Participant* for the purposes referred to in clause 2.5A). However, as set out in clause 8.2.1(a1), for the purposes of some provisions of clause 8.2 only, *NEMMCO* and *Connection Applicants* who are not otherwise *Registered Participants* are also deemed to be *Registered Participants*.

**Registered Participant Agent**

An agent of a *Registered Participant* appointed under clause 4.11.5.

**regulated interconnector**

An *interconnector* which is referred to in clause 11.8.2 of the *Rules* and is subject to *transmission service* regulation and pricing arrangements in Chapter 6A.

**regulating capability**

The capability to perform *regulating duty*.

**regulating capability constraints**

*Constraints* on the formulation of a realisable *dispatch* or *predispatch schedule* due to the need to provide for *regulating capability*.

**regulating duty**

In relation to a *generating unit*, the duty to have its *generated* output adjusted frequently so that any *power system frequency* variations can be corrected.

**regulating lower service**

The service of controlling the level of *generation* or *load* associated with a particular *facility*, in accordance with the requirements of the *market ancillary service specification*, in accordance with electronic signals from *NEMMCO* in order to lower the *frequency* of the *power system*.

**regulating raise service**

The service of controlling the level of *generation* or *load* associated with a particular *facility*, in accordance with the requirements of the *market ancillary service specification*, in accordance with electronic signals from *NEMMCO* in order to raise the *frequency* of the *power system*.

**regulation services**

The *regulating raise service* and *regulating lower service*.

**regulatory change event**

A change in a *regulatory obligation* or *requirement* that:

- (a) falls within no other category of *pass through event*; and
- (b) occurs during the course of a *regulatory control period*; and
- (c) substantially affects the manner in which the *Transmission Network Service Provider* provides *prescribed transmission services* or the *Distribution Network Service Provider* provides *direct control services* (as the case requires); and
- (d) *materially* increases or *materially* decreases the costs of providing those services.

**regulatory control period**

- (a) In respect of a *Transmission Network Service Provider*, a period of not less than 5 *regulatory years* in which a *total revenue cap* applies to that provider by virtue of a *revenue determination*.
- (b) In respect of a *Distribution Network Service Provider*, a period of not less than 5 *regulatory years* for which the provider is subject to a control mechanism imposed by a distribution determination.

**regulatory obligation or requirement**

Has the meaning assigned in the Law.

**regulatory proposal**

A proposal (by a *Distribution Network Service Provider*) under rule 6.8.

**regulatory test**

The test developed and published by the *AER* in accordance with clause 5.6.5A, as in force from time to time, and includes amendments made in accordance with clause 5.6.5A.

**regulatory year**

Each consecutive period of 12 calendar months in a *regulatory control period*, the first such 12 month period commencing at the beginning of the *regulatory control period* and the final 12 month period ending at the end of the *regulatory control period*.

**related body corporate**

In relation to a body corporate, a body corporate that is related to the first-mentioned body by virtue of the Corporations Act 2001 (Cth).

**releasable user guide**

A document associated with a functional block diagram and model source code provided under clause S5.2.4(b) (combined, forming the “**model**”), that contains sufficient information to enable a *Registered Participant* to use encrypted model source code provided under clause 3.13.3(l) to carry out *power system* studies for planning and operational purposes. The information in a releasable user guide must include, but is not limited to:

- (1) the **model** parameters and their values;
- (2) information about how the **model** parameter values vary with the operating state or output level of the *plant* or with the operating state or output level of any associated *plant*;
- (3) instructions relevant to the use and operation of the encrypted model source code provided under clause 3.13.3(l);
- (4) settings of *protection systems* that are relevant to load flow or dynamic simulation studies;
- (5) information provided in accordance with Schedule 5.5 only to the extent that the information is not a part of the **model** or the **model** parameters and that is reasonably necessary to allow modelling of the *generating unit*, *generating system* or related *plant* in *power system* load flow or dynamic simulation studies;
- (6) *connection point* details including its parameters and values, location, *network augmentations* or modifications and other relevant *connection* information; and
- (7) if the *generating unit* or *generating system*, as appropriate, is not yet *connected*, the expected *connection* and commissioning dates.

**relevant NEMMCO intervention event**

A *NEMMCO intervention event* that involves the exercise of the *reliability and emergency reserve trader* in accordance with rule 3.20 as referred to in paragraph (b) of the definition of *NEMMCO intervention event*.

**relevant tax**

Any tax payable by a *Transmission Network Service Provider* or a *Distribution Network Service Provider* other than:

- (a) income tax and capital gains tax;
- (b) stamp duty, financial institutions duty and bank accounts debits tax;
- (c) penalties, charges, fees and interest on late payments, or deficiencies in payments, relating to any tax; or
- (d) any tax that replaces or is the equivalent of or similar to any of the taxes referred to in paragraphs (a) to (b) (including any State equivalent tax).

**Relevant Transmission Network Service Provider, Relevant TNSP**

In respect of clause 5.7.7 has the meaning given in clause 5.7.7(a).

**reliability**

The probability of a system, device, *plant* or equipment performing its function adequately for the period of time intended, under the operating conditions encountered.

**reliability and emergency reserve trader (RERT)**

The actions taken by *NEMMCO* as referred to in clause 3.20.2, in accordance with rule 3.20, to ensure reliability of *supply*.

**reliability augmentation**

A *transmission network augmentation* that is necessitated principally by inability to meet the minimum *network* performance requirements set out in schedule 5.1 or in relevant legislation, regulations or any statutory instrument of a *participating jurisdiction*.

**Reliability Panel**

The panel established by the *AEMC* under section 38 of the *National Electricity Law*.

**reliable**

The expression of a recognised degree of confidence in the certainty of an event or action occurring when expected.

**reliable operating state**

In relation to the *power system*, has the meaning set out in clause 4.2.7.

**remote acquisition**

The acquisition of interval *metering data* from a *metering installation*, where the acquisition process transmits the *metering data* from the site of the *metering point* to the *metering database*, and does not, at any time, require the presence of a person at, or near, the interval *meter* for the purposes of data collection or data verification (whether this occurs manually as a walk-by reading or through the use of a vehicle as a close proximity drive-by reading), and remote acquisition includes but is not limited to methods that transmit *metering data* via:

- (1) direct dial-up;
- (2) satellite;
- (3) the internet;
- (4) a general packet radio service;
- (5) power line carrier; or
- (6) any other equivalent technology.

**remote control equipment**

Equipment used to control the operation of elements of a *power station* or *substation* from a *control centre*.

**remote monitoring equipment**

Equipment installed to enable monitoring of a *facility* from a *control centre*.

**replacement transmission network asset**

A new asset of a *Transmission Network Service Provider* that will replace any existing element of its *transmission network* in respect of which the *Transmission Network Service Provider* reasonably estimates it will be required to invest total capitalised expenditure in excess of \$5 million (as varied in accordance with a *total capitalised expenditure threshold determination*). For the avoidance of doubt, if the expenditure on replacing any existing element also results in an *augmentation* to the network, then such an asset shall be included in this definition where the *Transmission Network Service Provider* has estimated that the asset will have a total capitalised expenditure in excess of \$5 million.

### **representative**

In relation to a person, any employee, agent or professional adviser of:

- (a) that person; or
- (b) a *related body corporate* of that person; or
- (c) a third party contractor to that person.

### **required pass through amount**

In respect of a *negative change event* for a *Transmission Network Service Provider*, the costs in the provision of *prescribed transmission services* that the *Transmission Network Service Provider* has saved and is likely to save until the end of the *regulatory control period* as a result of that *negative change event* (as opposed to the revenue impact of that event).

In respect of a *negative change event* for a *Distribution Network Service Provider*, the costs in the provision of *direct control services* that the *Distribution Network Service Provider* has saved and is likely to save up to the end of the *regulatory control period* as a result of the *negative change event* (as opposed to the revenue impact of that event).

### **RERT guidelines**

The guidelines developed and *published* by the *Reliability Panel* under clause 3.20.8.

### **RERT principles**

The principles referred to in clause 3.20.2(b).

### **reserve**

*Scheduled reserve* or *unscheduled reserve*.

### **reserve contract**

A *scheduled reserve contract* or an *unscheduled reserve contract*.

### **response breakpoint**

- (a) In relation to a *market ancillary service offer* to raise the *frequency* of the *power system*, the level of associated *generation* or *load* (in MW) above which the amount of response specified in the *offer* reduces with increased *generation* or *load* level; and
- (b) in relation to a *market ancillary service offer* to lower the *frequency* of the *power system*, the level of associated *generation* or *load* (in MW) below which the amount of response specified in the *offer* reduces with decreased *generation* or *load* level.

**response capability**

- (a) In relation to a *market ancillary service offer* to raise the *frequency* of the *power system*, the amount of the response in (MW) which is specified in the *offer* for every level of associated *generation* or *load* below the associated *response breakpoint*; and
- (b) in relation to a *market ancillary service offer* to lower the *frequency* of the *power system*, the amount of the response in (MW) which is specified in the *offer* for every level of associated *generation* or *load* above the associated *response breakpoint*.

**responsible person**

The person who has responsibility for the provision of a *metering installation* for a particular *connection point*, being either the *Local Network Service Provider* or the *Market Participant* as described in Chapter 7.

**restriction demand reduction**

The reduction in a *Market Customer's* demand due to the imposition of *mandatory restrictions* as reasonably determined by an independent expert in accordance with clause 3.12A.7. For the avoidance of doubt, the reduction of a *Market Customer's* demand due to the imposition of *mandatory restrictions* should exclude any reduction in its demand which the *Market Customer* claims was due to the operation of *generation* and as reasonably verified by the independent expert in a similar manner to that used by the independent expert to determine restrictions due to demand management.

**restriction offer**

An offer by a *Scheduled Generator* or a *Scheduled Network Service Provider* to provide capacity to *NEMMCO* for all or part of a *mandatory restriction period* made in accordance with the *restriction offer procedures*.

**restriction offer procedures**

The procedures developed by *NEMMCO* in accordance with clause 3.12A.1.

**restriction shortfall amount**

The amount determined in accordance with clause 3.12A.7(b).

**retailer of last resort**

In relation to a jurisdiction, means a person or persons required under the retailer of last resort arrangements of that jurisdiction to assume the obligations under the *Rules* (including the obligation to pay *trading amounts* and other amounts due under the *Rules*) of a *Market Customer* that has defaulted in the performance of its obligations under the *Rules*.



**revenue determination**

A determination referred to in clause 6A.2.2(1) and rule 6A.4 as substituted (if at all) pursuant to clause 6A.7.1 or rule 6A.15 or as amended pursuant to clause 6A.8.2.

**revenue meter**

The *meter* that is used for obtaining the primary source of *metering data*.

**revenue metering data**

The *metering data* obtained from a *revenue metering installation*.

**revenue metering installation**

A *metering installation* used as the primary source of *metering data* for the *settlements* process.

**revenue metering point**

The *metering point* at which the *revenue metering installation* is connected.

**Revenue Proposal**

For a *Transmission Network Service Provider*, a proposal submitted or resubmitted by the *Transmission Network Service Provider* to the *AER* pursuant to clause 6A.10.1(a), clause 6A.11.2 or clause 6A.12.3(a) (as the context requires).

**review**

An examination of the specified matters conducted to the standard specified for a "review" in Auditing Standard AUS106: "Explanatory Framework for standards on Audit and Audit Related Services" prepared by the Auditing Standards Board, as varied from time to time.

**revised statement**

A statement issued by *NEMMCO* under clause 3.15.19 following the resolution of a dispute regarding a *final statement*.

**RMS phase voltage**

The *voltage of supply* measured as the average of the root mean square of the *voltages* between each pair of phases.

**roll forward model**

According to context:

- (a) the model developed and published by the *AER* for the roll forward of the regulatory asset base for *transmission systems* in accordance with clause 6A.6.1;

- (b) the model developed and published by the *AER* for the roll forward of the regulatory asset base for *distribution systems* in accordance with clause 6.5.1.

**routine revised statement**

A *settlement statement* issued by *NEMMCO* under clause 3.15.19(b).

**Rule fund**

A fund referred to in clause 1.11(a).

**Rules**

The rules called the National Electricity Rules made under Part 7 of *the National Electricity Law* as amended from time to time in accordance with that Part.

**Rules bodies**

Any person or body, other than *NEMMCO*, the *AER*, the *AEMC*, or the *ACCC*, that is appointed or constituted by the *Rules* to perform functions under the *Rules*.

**Rules consultation procedures**

The procedures for consultation with *Registered Participants* or other persons as set out in clause 8.9.

**satisfactory operating state**

In relation to the *power system*, has the meaning given in clause 4.2.2.

**scheduled generating unit**

- (a) A *generating unit* so classified in accordance with Chapter 2.
- (b) For the purposes of Chapter 3 and rule 4.9, two or more *generating units* referred to in paragraph (a) that have been aggregated in accordance with clause 3.8.3.

**scheduled generating system**

A *generating system* comprising *scheduled generating units*.

**Scheduled Generator**

A *Generator* in respect of which any *generating unit* is classified as a *scheduled generating unit* in accordance with Chapter 2.

**scheduled high price**

The dollar amount per MWh or MW, as the case may be, determined as such by *NEMMCO* pursuant to clause 3.3.17.

**scheduled load**

- (a) A *market load* which has been classified by *NEMMCO* in accordance with Chapter 2 as a *scheduled load* at the *Market Customer's* request. Under Chapter 3, a *Market Customer* may submit *dispatch bids* in relation to *scheduled loads*.
- (b) For the purposes of Chapter 3 and rule 4.9, two or more *scheduled loads* referred to in paragraph (a) that have been aggregated in accordance with clause 3.8.3.

**scheduled low price**

The dollar amount per MWh or MW, as the case may be, determined as such by *NEMMCO* pursuant to clause 3.3.17.

**scheduled network service**

- (a) A *network service* which is classified as a *scheduled network service* in accordance with Chapter 2.
- (b) For the purposes of Chapter 3 and rule 4.9, two or more *scheduled network services* referred to in paragraph (a) that have been aggregated in accordance with clause 3.8.3.

**Scheduled Network Service Provider**

A *Network Service Provider* who has classified any of its *network services* as a *scheduled network service*.

**scheduled plant**

In respect of a *Registered Participant*, a *scheduled generating unit*, a *semi-scheduled generating unit*, a *scheduled network service* or a *scheduled load* classified by or in respect to that *Registered Participant* in accordance with Chapter 2.

**scheduled reserve**

The amount of surplus or unused capacity:

- (a) of *scheduled generating units*;
- (b) of *scheduled network services*; or
- (c) arising out of the ability to reduce *scheduled loads*.

**scheduled reserve contract**

A contract entered into by *NEMMCO* for the provision of *scheduled reserve* in accordance with rule 3.20.

**scheduling error**

*Scheduling error* means any of the events described in clause 3.8.24(a).

**secondary equipment**

Those assets of a *Market Participant's facility* which do not carry the *energy* being traded, but which are required for control, protection or operation of assets which carry such *energy*.

**secondary restart service**

A *system restart ancillary service* that meets the technical and availability requirements of a *secondary restart service* specified by *NEMMCO* under clause 3.11.4A(d).

**Second-Tier Customer**

A *Customer* which has classified any *load* as a *second-tier load* in accordance with Chapter 2.

**second-tier load**

Electricity purchased at a *connection point* in its entirety other than directly from the *Local Retailer* or the *spot market* and which is classified as a *second-tier load* in accordance with Chapter 2.

**secure operating state**

In relation to the *power system* has the meaning given in clause 4.2.4.

**self-commitment, self-commit**

*Commitment*, where the decision to *commit* a *generating unit* was made by the relevant *Generator* without instruction or direction from *NEMMCO*.

**self-decommitment**

*Decommitment*, where the decision to *decommit* a *generating unit* was made by the relevant *Generator* without instruction or direction from *NEMMCO*.

**semi-dispatch interval**

For a *semi-scheduled generating unit*, a *dispatch interval* for which either:

- (a) a *network constraint* would be violated if the *semi-scheduled generating unit's generation* were to exceed the *dispatch level* specified in the related *dispatch instruction* at the end of the *dispatch interval*; or

- (b) the *dispatch level* specified in that *dispatch instruction* is less than the *unconstrained intermittent generation forecast* at the end of the *dispatch interval*,

and which is notified by *NEMMCO* in that *dispatch instruction* to be a *semi-dispatch interval*.

### **self-dispatch level**

The level of *generation* in MW, as specified in a *dispatch offer* for a *generating unit* and a *trading interval*, which is the level at which that *generating unit* must be *dispatched* by *NEMMCO* in that *trading interval* unless otherwise *dispatched* in accordance with clause 3.8 or unless required to operate under a *direction* issued by *NEMMCO* in accordance with clause 4.8.9.

### **semi-scheduled generating system**

A *generating system* comprising *semi-scheduled generating units*.

### **semi-scheduled generating unit**

- (a) A *generating unit* classified in accordance with clause 2.2.7.
- (b) For the purposes of Chapter 3 and rule 4.9, two or more *generating units* referred to in paragraph (a) that have been aggregated in accordance with clause 3.8.3.

### **Semi-Scheduled Generator**

A *Generator* in respect of which any *generating unit* is classified as a *semi-scheduled generating unit* in accordance with Chapter 2.

### **sensitive loads**

*Loads* defined as sensitive for each *participating jurisdiction* by the *Jurisdictional System Security Coordinator* for that *participating jurisdiction*.

### **sent out generation**

In relation to a *generating unit*, the amount of electricity *supplied* to the *transmission* or *distribution network* at its *connection point*.

### **Service Applicant**

According to context:

- (a) a person who is an existing or intending *Registered Participant* or a person who is eligible to become a *Registered Participant*; or
- (b) a person who asks a *Distribution Network Service Provider* for access to a *distribution service*.

**service standard event**

A legislative or administrative act or decision that:

- (a) has the effect of:
  - (i) substantially varying, during the course of a *regulatory control period*, the manner in which a *Transmission Network Service Provider* is required to provide a *prescribed transmission service*, or a *Distribution Network Service Provider* is required to provide a *direct control service*; or
  - (ii) imposing, removing or varying, during the course of a *regulatory control period*, minimum service standards applicable to *prescribed transmission services* or *direct control services*; or
  - (iii) altering, during the course of a *regulatory control period*, the nature or scope of the *prescribed transmission services* or *direct control services*, provided by the service provider; and
- (b) *materially* increases or *materially* decreases the costs to the service provider of providing *prescribed transmission services* or *direct control services*.

**service target performance incentive scheme**

A For a *Transmission Network Service Provider* – a scheme developed and published by the AER in accordance with clause 6A.7.4.

For a *Distribution Network Service Provider* – a scheme developed and published by the AER in accordance with clause 6.6.2.

**settlement amount**

The amount calculated by NEMMCO pursuant to clause 3.15.12.

**settlement statement**

Includes an *interim statement*, *preliminary statement* and *final statement*.

**settlements**

The activity of producing bills and credit notes for *Market Participants*.

**settlements ready data**

The *metering data* that has undergone a validation and substitution process by NEMMCO for the purpose of *settlements* and is delivered to the *metering database*.

**settlements residue**

Any surplus or deficit of funds retained by *NEMMCO* upon completion of *settlements* to all *Market Participants* in respect of a *trading interval*.

**settlement residue committee**

The committee established by *NEMMCO* in accordance with clause 3.18.5.

**settlement residue distribution agreement or SRD agreement**

Has the meaning given in clause 3.18.1(b).

**shared distribution service**

A service provided to a *Distribution Network User* for use of a *distribution network* for the conveyance of electricity (including a service that ensures the integrity of the related *distribution system*).

**shared transmission service**

A service provided to a *Transmission Network User* for use of a *transmission network* for the conveyance of electricity (including a service that ensures the integrity of the related *transmission system*).

**short circuit fault**

A fault having a metallic conducting path between any two or more conductors or between any conductor and ground, including touching conductors and faults through earthing facilities, and excluding faults within equipment at a station.

**short term capacity reserve**

At any time, the amount of surplus or unused generating capacity indicated by the relevant *Generators* as being available for any half hour period during the next 7 *days* and which is assessed as being in excess of the capacity requirement to meet the current forecast *load* demand, taking into account the known or historical levels of demand management.

**short term capacity reserve standard**

The level of *short term capacity reserve* required for a particular period in accordance with the *power system security and reliability standards*.

**short term PASA**

The *PASA* in respect of the period from 2 *days* after the current *trading day* to the end of the 7<sup>th</sup> day after the current *trading day* inclusive in respect of each *trading interval* in that period.

**short term PASA inputs**

The inputs to be prepared by *NEMMCO* in accordance with clause 3.7.3(d).

**shunt capacitor**

A type of *plant connected to a network to generate reactive power.*

**shunt reactor**

A type of *plant connected to a network to absorb reactive power.*

**single contingency**

In respect of a *transmission or distribution network and Network Users*, a sequence of related events which result in the removal from service of one *Network User, transmission or distribution line, or transformer.* The sequence of events may include the application and clearance of a fault of defined severity.

**slow lower service**

The service of providing, in accordance with the requirements of the *market ancillary service specification*, the capability of controlling the level of *generation or load* associated with a particular *facility* in response to the locally sensed *frequency* of the *power system* in order to stabilise a rise in that *frequency.*

**slow raise service**

The service of providing, in accordance with the requirements of the *market ancillary service specification*, the capability of controlling the level of *generation or load* associated with a particular *facility* in response to the locally sensed *frequency* of the *power system* in order to stabilise a fall in that *frequency.*

**slow start generating unit**

A *generating unit* described in clause 3.8.17(a).

**slow start reserve generating unit**

A *slow start generating unit* providing *scheduled reserve.*

**Special Participant**

A *System Operator* or a *Distribution System Operator.*

**special revised statement**

A *settlement statement* issued by *NEMMCO* under clause 3.15.19(a)(3).

**spot market**

The spot market established and operated by *NEMMCO* in accordance with clause 3.4.1.

**spot market transaction**

A transaction as defined pursuant to clause 3.15.6 which occurs in the *spot market.*



**spot price**

The price for electricity in a *trading interval* at a *regional reference node* or a *connection point* as determined in accordance with clause 3.9.2.

**spot price forecast**

A forecast of the *spot price*.

**SRAS**

A *system restart ancillary service*.

**stand-alone amount**

For a *category of prescribed transmission services*, the costs of a *transmission system* asset that would have been incurred had that *transmission system* asset been developed, exclusively to provide that *category of prescribed transmission services*.

**standard control service**

A *direct control service* that is subject to a control mechanism based on a *Distribution Network Service Provider's total revenue requirement*.

**Standards Australia**

The Standards Association of Australia and includes its heirs or successors in business.

**statement of opportunities**

A statement prepared by *NEMMCO* to provide information to assist *Scheduled Generators*, *Semi-Scheduled Generators*, *Transmission Network Service Providers* and *Market Participants* in making an assessment of the future need for electricity generating or demand management capacity or augmentation of the *power system*.

**statement of regulatory intent**

A statement issued by the *AER* under clause 6.5.4(c).

**static excitation system**

An *excitation control system* in which the power to the rotor of a *synchronous generating unit* is transmitted through high power solid-state electronic devices.

**static VAR compensator**

A device specifically provided on a *network* to provide the ability to generate and absorb *reactive power* and to respond automatically and rapidly to *voltage* fluctuations or *voltage* instability arising from a disturbance or disruption on the *network*.

**submission guidelines**

The guidelines made by the *AER* in accordance with rule 6A.10 for the purposes of guiding a *Transmission Network Service Provider* in the submission of a *Revenue Proposal* under Part E of Chapter 6A.

**substation**

A *facility* at which two or more lines are switched for operational purposes. May include one or more *transformers* so that some *connected* lines operate at different nominal *voltages* to others.

**supply**

The delivery of electricity.

**survey period**

An agreed sample period used to determine the allocation of costs and prices for use of *transmission network* or *distribution network* assets.

**suspended region**

A region in which the *spot market* is suspended in accordance with clause 3.14.5(a).

**suspension notice**

A notice issued by *NEMMCO* to a *defaulting Market Participant* pursuant to clause 3.15.21(c).

**switchyard**

The *connection point* of a *generating unit* into the *network*, generally involving the ability to *connect* the *generating unit* to one or more outgoing *network* circuits.

**Sydney time**

Eastern Standard Time or Eastern Daylight Saving Time as applicable in Sydney.

**synchronise**

The act of *synchronising* a *generating unit* or a *scheduled network service* to the *power system*.

**synchronising, synchronisation**

To electrically *connect* a *generating unit* or a *scheduled network service* to the *power system*.

**synchronous condensers**

*Plant*, similar in construction to a *generating unit* of the *synchronous generator* category, which operates at the equivalent speed of the *frequency* of the *power*

*system*, specifically provided to generate or absorb *reactive power* through the adjustment of rotor current.

**synchronous generating unit**

The alternating current generators of most thermal and hydro (water) driven power turbines which operate at the equivalent speed of the *frequency* of the *power system* in its *satisfactory operating state*.

**synchronous generator voltage control**

The automatic *voltage control system* of a *generating unit* of the *synchronous generator* category which changes the output *voltage* of the *generating unit* through the adjustment of the generator rotor current and effectively changes the *reactive power* output from that *generating unit*.

**System Operator**

A person whom *NEMMCO* has engaged as its agent, or appointed as its delegate, under clause 4.3.3 to carry out some or all of *NEMMCO*'s rights, functions and obligations under Chapter 4 of the *Rules* and who is registered by *NEMMCO* as a *System Operator* under Chapter 2.

**system restart ancillary service**

A service provided by *facilities* with *black start capability* which allows:

- (a) *energy* to be supplied; and
- (b) a *connection* to be established,

sufficient to restart large *generating units* following a *major supply disruption*.

**system restart plan**

The plan described in clause 4.8.12(a).

**system restart standard**

The standard as determined by the *Reliability Panel* in accordance with clause 8.8.3(a)(1a), for the acquisition of *system restart ancillary services*.

**system standard**

A standard for the performance of the *power system* as set out in schedule 5.1a.

**system-wide benefits**

Benefits that extend beyond a *Transmission Network User*, or group of *Transmission Network Users*, at a single *transmission connection point* to other *Transmission Network Users*.

**take or pay contract**

A contract between a buyer and a seller of an asset-based service under which the buyer undertakes to pay regularly to the seller a fixed or minimum sum regardless of the actual level of consumption of the service by the buyer. The contract has the effect of transferring market risk associated with the assets from the seller (as the owner of the assets) to the buyer.

**tap-changing transformer**

A *transformer* with the capability to allow internal adjustment of output *voltages* which can be automatically or manually initiated and which is used as a major component in the control of the *voltage* of *transmission* and *distribution networks* in conjunction with the operation of *reactive plant*. The *connection point* of a *generating unit* may have an associated tap-changing transformer, usually provided by the *Generator*.

**tariff class**

A class of customers for one or more *direct control services* who are subject to a particular tariff or particular tariffs.

**tax**

Any tax, levy, impost, deduction, charge, rate, rebate, duty, fee or withholding which is levied or imposed by an *Authority*.

**tax change event**

A tax change event occurs if:

- (a) any of the following occurs during the course of a *regulatory control period* for a *Transmission Network Service Provider* or a *Distribution Network Service Provider*:
  - (i) a change in a *relevant tax*, in the application or official interpretation of a *relevant tax*, in the rate of a *relevant tax*, or in the way a *relevant tax* is calculated;
  - (ii) the removal of a *relevant tax*;
  - (iii) the imposition of a *relevant tax*; and
- (b) in consequence, the costs to the service provider of providing *prescribed transmission services* or *direct control services* are materially increased or decreased.

**technical envelope**

The limits described in clause 4.2.5.

### **telecommunications network**

A telecommunications network that provides access for public use or an alternate telecommunications network that has been approved by *NEMMCO* for the delivery of *metering data*.

### **template for generator compliance programs**

The template determined and *published* by the *Reliability Panel* under clause 8.8.3 of the *Rules*.

### **terms and conditions of access**

According to context:

- (a) the terms and conditions described in clause 6A.1.2 (access to transmission services);
- (b) the terms and conditions described in clause 6.1.3 (access to *distribution services*).

### **terrorism event**

An act (including, but not limited to, the use of force or violence or the threat of force or violence) of any person or group of persons (whether acting alone or on behalf of in connection with any organisation or government), which from its nature or context is done for, or in connection with, political, religious, ideological, ethnic or similar purposes or reasons (including the intention to influence or intimidate any government and/or put the public, or any section of the public, in fear) and which *materially* increases the costs to a *Transmission Network Service Provider* of providing *prescribed transmission services* or the costs to a *Distribution Network Service Provider* of providing *direct control services*.

### **test program**

In respect of an *inter-network test*, means the program and co-ordination arrangements for the test including, without limitation:

- (1) test procedures;
- (2) the proposed timing of the test;
- (3) operational procedures to manage *power system security* during the test;
- (4) required *power system* conditions for conducting the test;
- (5) test facilitation services including, as necessary, *ancillary services* required to achieve those *power system* conditions;

- (6) criteria for continuing or concluding a test and the decision-making process relevant to the test; and
- (7) contingency arrangements.

**tie**

Identically priced *dispatch bids* or *dispatch offers*.

**time**

*Eastern Standard Time*.

**time stamp**

The means of identifying the *time* and date at which data is transmitted or received.

**timetable**

The timetable published by *NEMMCO* under clause 3.4.3 for the operation of the *spot market* and the provision of *market* information.

**total capitalised expenditure threshold**

Means each of the following amounts:

- (a) the total capitalised expenditure in excess of \$20 million referred to in the definition of "new large transmission network asset";
- (b) the total capitalised expenditure in excess of \$5 million referred to in the definition of "new small transmission network asset"; and
- (c) the total capitalised expenditure in excess of \$5 million referred to in the definition of "replacement transmission network asset".

**total capitalised expenditure threshold consultation period**

Has the meaning given in clause 5.6.6C(d).

**total capitalised expenditure threshold determination**

Means a determination made by the *AER* in accordance with clause 5.6.6C(e).

**total capitalised expenditure threshold review**

Has the meaning given in clause 5.6.6C(a).

**total revenue cap**

For a *Transmission Network Service Provider* for a *regulatory control period*, the sum of the *maximum allowed revenues* for that provider for each *regulatory year* of that *regulatory control period* as calculated in accordance with clause 6A.5.3 and set out in a *revenue determination*.

**total revenue requirement**

For a *Distribution Network Service Provider*, an amount representing revenue calculated for the whole of a *regulatory control period* in accordance with Part C of Chapter 6.

**Trader**

A person who is registered by *NEMMCO* as a *Trader* under Chapter 2.

**trading amount**

The positive or negative dollar amount resulting from a *transaction*, determined pursuant to clauses 3.15.6, 3.15.6A or 3.15.11.

**trading day**

The 24 hour period commencing at 4.00 am and finishing at 4.00 am on the following *day*.

**trading interval**

A 30 minute period ending on the hour (EST) or on the half hour and, where identified by a time, means the 30 minute period ending at that time.

**trading limit**

A dollar amount for a *Market Participant*, determined pursuant to clause 3.3.10.

**trading margin**

Has the meaning given in clause 3.3.15.

**transaction**

A *spot market transaction*, *reallocation transaction* or any other transaction either in the *market* or to which *NEMMCO* is a party.

**transformer**

A *plant* or device that reduces or increases the *voltage* of alternating current.

**transformer tap position**

Where a tap changer is fitted to a *transformer*, each tap position represents a change in *voltage* ratio of the *transformer* which can be manually or automatically adjusted to change the *transformer* output *voltage*. The tap position is used as a reference for the output *voltage* of the *transformer*.

**transmission**

Activities pertaining to a *transmission system* including the conveyance of electricity through that *transmission system*.

**transmission consultation procedures**

The procedures set out in Part H of Chapter 6A that must be followed by:

- (a) the *AER* in making, developing or amending guidelines, models or schemes or in reviewing methodologies; or
- (b) the *AEMC* in developing or amending guidelines.

**Transmission Customer**

A *Customer*, *Non-Registered Customer* or *Distribution Network Service Provider* having a *connection point* with a *transmission network*.

**transmission determination**

Has the meaning given in the *National Electricity Law*, and includes a determination by the *AER* as described in rule 6A.2.

**transmission element**

A single identifiable major component of a *transmission system* involving:

- (a) an individual *transmission* circuit or a phase of that circuit;
- (b) a major item of *transmission plant* necessary for the functioning of a particular *transmission* circuit or *connection point* (such as a *transformer* or a circuit breaker).

**transmission line**

A power line that is part of a *transmission network*.

**transmission network**

A *network* within any *participating jurisdiction* operating at nominal *voltages* of 220 kV and above plus:

- (a) any part of a *network* operating at nominal *voltages* between 66 kV and 220 kV that operates in parallel to and provides support to the higher voltage *transmission network*;
- (b) any part of a *network* operating at nominal *voltages* between 66 kV and 220 kV that is not referred to in paragraph (a) but is deemed by the *AER* to be part of the *transmission network*.

**transmission network connection point**

A *connection point* on a *transmission network*.

**Transmission Network Service Provider**

A person who engages in the activity of owning, controlling or operating a *transmission system*.



### **Transmission Network User**

In relation to a *transmission network*, a *Transmission Customer*, a *Generator* whose *generating unit* is directly *connected* to the *transmission network* or a *Network Service Provider* whose *network* is *connected* to the *transmission network*.

### **transmission network user access**

The *power transfer capability* of the *transmission network* in respect of:

- (a) *generating units* or group of *generating units*;
- (b) *network elements*; or
- (c) *plant*,

at a *connection point* which has been negotiated in accordance with rule 5.4A.

### **transmission or distribution system**

A *transmission system* or *distribution system* that:

1. is used to convey, and control the conveyance of, electricity to customers (whether wholesale or retail); and
2. is *connected* to another such system.

### **transmission plant**

Apparatus or equipment associated with the function or operation of a *transmission line* or an associated *substation* or *switchyard*, which may include *transformers*, circuit breakers, *reactive plant* and *monitoring equipment* and control equipment.

### **Transmission Ring-Fencing Guidelines**

The Guidelines made under rule 6A.21.

### **transmission service**

The services provided by means of, or in connection with, a *transmission system*.

### **transmission services access dispute**

A dispute between a *Transmission Network Service Provider* and a *Service Applicant* as to *terms and conditions of access* for the provision of *prescribed transmission services* or for the provision of *negotiated transmission services* as referred to in clause 6A.1.2, that is for determination by a *commercial arbitrator* under Part K of Chapter 6A.

**transmission standard control service**

Has the meaning given in rule 6.25(a).

**transmission standard control service revenue**

Has the meaning given in rule 6.26(b)(1).

**transmission system**

A *transmission network*, together with the *connection assets* associated with the *transmission network*, which is connected to another *transmission or distribution system*.

**transmission use of system, transmission use of system service**

A *Generator transmission use of system service* or a *Customer transmission use of system service*.

**trigger event**

In relation to a *proposed contingent project* or a *contingent project*, a specific condition or event described in clause 6A.8.1(c), the occurrence of which, during the relevant *regulatory control period*, may result in the amendment of a *revenue determination* under clause 6A.8.2.

**two-terminal link**

One or more *network elements* that together enable the transfer of *energy* between two, and only two, *connection points*.

**type 5 accumulation boundary**

The volume of *energy* for a *connection point* above which the *metering data* that is extracted or emanates from a *type 5 metering installation* must be extracted or emanate as *interval energy data* for the purpose of producing *settlements ready data*.

[**Note:** Below the type 5 accumulation boundary, the metering data may be extracted or emanate from the metering installation as accumulated energy data for the purpose of producing settlements ready data, in which case the metering installation must be registered with NEMMCO as a type 6 metering installation. Otherwise the metering data may be extracted or emanate as interval energy data for the purpose of producing settlements ready data in which case the metering installation must be registered with NEMMCO as a type 5 metering installation.]

**typical accrual**

Has the meaning given in clause 3.3.12(a).

**uncompleted transaction**

Has the meaning given in clause 3.3.16(b).

**unconstrained**

Free of *constraint*.

**unconstrained intermittent generation forecast**

The forecast prepared by *NEMMCO* in accordance with rule 3.7B of the *available capacity* of each *semi-scheduled generating unit*.

**under-recovery amount**

Any amount by which the sum of the *AARR* in previous *financial years* exceeds the revenue earned from the provision of *prescribed transmission services* in those previous years, grossed up by the application of an annual interest rate approved by the *AER* for this purpose.

**unmetered connection point**

A *connection point* at which a *meter* is not necessary under schedule 7.2.

**unscheduled reserve**

The amount of surplus or unused capacity:

- (a) of *generating units* (other than *scheduled generating units*); or
- (b) arising out of the ability to reduce demand (other than a *scheduled load*).

**unscheduled reserve contract**

A contract entered into by *NEMMCO* for the provision of *unscheduled reserve* in accordance with rule 3.20.

**unserved energy**

The amount of *energy* that is demanded, but cannot be supplied, in a *region* and which is defined in accordance with the *power system security and reliability standards* and is expressed as:

- (a) GWh; or
- (b) a percentage of the total *energy* demanded in that *region* over a specific period of time such as a year.

**use of system**

Includes *transmission use of system* and *distribution use of system*.

**use of system services**

*Transmission use of system service* and *distribution use of system service*.

**value of lost load (VoLL)**

A price cap on *regional reference prices*, described in clause 3.9.4.

**violation**

In relation to *power system security*, a failure to meet the requirements of Chapter 4 or the *power system security and reliability standards*.

**virtual transmission node**

A non-physical node used for the purpose of *market settlements*, having a *transmission loss factor* determined in accordance with clause 3.6.2(b)(3).

**voltage**

The electronic force or electric potential between two points that gives rise to the flow of electricity.

**voltage transformer (VT)**

A *transformer* for use with *meters* and/or protection devices in which the *voltage* across the secondary terminals is, within prescribed error limits, proportional to and in phase with the *voltage* across the primary terminals.

**WACC**

*Weighted average cost of capital*.

**weighted average cost of capital**

For a *Transmission Network Service Provider* for a *regulatory control period*, the return on capital for that *Transmission Network Service Provider* for that *regulatory control period* as calculated in accordance with clauses 6A.6.2(b) to (e), and in any other case an amount determined in a manner consistent with schedule 6.1.

For a *Distribution Network Service Provider* for a *regulatory control period*, the return on capital for that *Distribution Network Service Provider* for that *regulatory control period* calculated in accordance with clause 6.5.2.

**CHAPTER 11**

## 11. Savings and Transitional Rules

### Part A Negative Inter-regional Settlements Residue (2009 amendments)

#### 11.1 Rules consequent on making of the National Electricity Amendment (Negative Inter-regional Settlements Residue Amounts) Rule 2009

##### 11.1.1 Definitions

For the purposes of this rule 11.1:

**Amending Rule** means the National Electricity Amendment (Negative Inter-regional Settlements Residue Amounts) Rule 2009.

**commencement date** means the date of commencement of the Amending Rule.

**old clause 3.6.5(a)(4A)** means clause 3.6.5(a)(4A) of the *Rules* as in force immediately before the commencement date.

**old clause 3.6.5(a)(4B)** means clause 3.6.5(a)(4B) of the *Rules* as in force immediately before the commencement date.

##### 11.1.2 Recovery of accrued negative settlements residue

The old clause 3.6.5(a)(4A) continues to apply to any negative *settlements residue* amounts arising before the commencement date, and not recovered as at the commencement date, until all such negative amounts have been recovered.

##### 11.1.3 Recovery of interest costs associated with accrued negative settlements residue

The old clause 3.6.5(a)(4B) continues to apply to any interest costs arising before the commencement date, and not recovered as at the commencement date, until all such interest costs have been recovered.

### ~~Part A Negative Inter-Regional Settlements Residue (2006 and 2009 amendments)~~

#### ~~11.1 Rules consequent on making of the National Electricity Amendment (Negative Inter-Regional Settlements Residue) Rule 2006~~

## ~~and on the making of the National Electricity Amendment (Negative Settlements Residue Recovery, Extension of Sunset) Rule 2009~~

### ~~11.1.1 — Recovery of accrued negative settlements residue~~

- ~~(a) — Clause 3.6.5(a)(4), as in force immediately before 1 July 2006 which is the date the National Electricity Amendment (Negative Inter Regional Settlements Residue) Rule 2006 commences operation, continues to apply to any negative *settlements residue* amounts arising before 1 July 2005 and not recovered as at 1 July 2005 until all such negative amounts have been recovered.~~
- ~~(b) — Where negative *settlements residue* amounts arise on or after 1 July 2005 and are not recovered before 1 July 2006 which is the date the National Electricity Amendment (Negative Inter Regional Settlements Residue) Rule 2006 commences operation, then:
  - ~~(i) — the whole or any part of the amount may be recovered from the proceeds of the first *auction* after 1 July 2006 which is the date the National Electricity Amendment (Negative Inter Regional Settlements Residue) Rule 2006 commences operation; and~~
  - ~~(ii) — if the whole or a part of the amount is not recoverable under clause 11.1.1(b)(i), the unrecovered amount may be recovered from the proceeds of successive *auctions* until the negative amount is recovered.~~~~
- ~~(c) — Clause 3.6.5(a)(4A), as in force immediately before 30 June 2010, continues to apply to any *negative settlements residue* amounts arising on or after 1 July 2006 but before 30 June 2010, and not recovered as at 30 June 2010, until all such negative amounts have been recovered.~~

### ~~11.1.2 — Recovery of interest costs associated with accrued negative settlements residue~~

- ~~(a) — Where interest costs interest costs incurred by *NEMMCO* in relation to any unrecovered negative *settlements residue* amounts referred to in clause 3.6.5(a)(4A) arise on or after 1 July 2005 and are not recovered before 1 July 2006 which is the date the National Electricity Amendment (Negative Inter Regional Settlements Residue) Rule 2006 commences operation, then:
  - ~~(i) — the whole or any part of the interest costs may be recovered from the proceeds of the first *auction* after 1 July 2006 which is the date the National Electricity Amendment (Negative Inter Regional Settlements Residue) Rule 2006 commences operation; and~~
  - ~~(ii) — if the whole or a part of the interest costs are not recoverable under clause 11.1.2(b)(i), the unrecovered interest costs may be recovered~~~~

~~from the proceeds of successive auctions until the interest costs are recovered.~~

~~(b) Clause 3.6.5(a)(4B), as in force immediately before 30 June 2010, continues to apply to any interest costs arising on or after 1 July 2006 but before 30 June 2010, and not recovered as at 30 June 2010, until all such interest costs have been recovered.~~

## Part B System Restart Ancillary Services (2006 amendments)

### 11.2 Rules consequent on making of the National Electricity Amendment (System Restart Ancillary Services and pricing under market suspension) Rule 2006 No.6

#### 11.2.1 Transitional provision for acquisition of non-market ancillary services

(a) For the purposes of clause 11.2.1:

**Amending Rule** means the National Electricity Amendment (System Restart Ancillary Services and pricing under market suspension) Rule 2006.

**Existing NMAS contract** means an *ancillary services agreement* between NEMMCO and another person to acquire *non-market ancillary services* from that person, entered into prior to the NMAS commencement date.

**NMAS commencement date** means the date of commencement of the National Electricity Amendment (System Restart Ancillary Services and pricing under market suspension) Rule 2006;

(b) On the NMAS commencement date

(1) Any action taken by NEMMCO or a *Rules body* prior to the NMAS commencement date in anticipation of the commencement of the Amending Rule is deemed to have been taken for the purpose of the Amending Rule and continues to have effect for that purpose.

(2) NEMMCO may continue to acquire *non-market ancillary services* under an existing NMAS contract and may extend the period of an existing NMAS contract for such period as NEMMCO and that person reasonably determine.

(3) At any time when no *system restart standard* under clause 8.8.3(a)(1a) is in force, NEMMCO must develop and *publish* an interim *system restart standard* that is:

(i) consistent with the requirements in clause 8.8.3(a); and



(ii) approved by the *Reliability Panel*;

and the interim *system restart standard* applies until such time as the *Reliability Panel* determines a *system restart standard*.

### 11.3 [Deleted]

## Part C Dispute Resolution for Regulatory Test (2006 amendments)

### 11.4 Rules consequent on making of the National Electricity Amendment (Dispute Resolution for Regulatory Test) Rule 2006

#### 11.4.1 Continuation of things done under old clause 5.6.6

(a) For the purposes of clause 11.4.1:

**amending Rule** means the National Electricity Amendment (Dispute Resolution for Regulatory Test) Rule 2006

**commencement date** means the date of commencement of the amending Rule

**new clause 5.6.6** means clause 5.6.6 after the commencement of the amending Rule

**old clause 5.6.6** means clause 5.6.6 before the commencement of the amending Rule.

(b) On the commencement date:

(1) any dispute commenced under the old clause 5.6.6 and not completed before the commencement date, must continue to be conducted and completed as if it were a dispute commenced in accordance with the old clause 5.6.6.

(2) Subject to clause 11.4.1(b)(1), any action taken under the old clause 5.6.6 is deemed to have been taken for the purposes of the corresponding requirement in the new clause 5.6.6 and continues to have effect for those purposes.

## Part D Metrology (2006 amendments)

### 11.5 Rules consequential on the making of the National Electricity Amendment (Metrology) Rule 2006

#### 11.5.1 Definitions

For the purposes of this rule 11.5:

**Amending Rule** means the National Electricity Amendment (Metrology) Rule 2006.

**commencement date** means the day on which the Amending Rule commences operation.

**old Chapter 7** means Chapter 7 of the *Rules* as in force immediately before the commencement date.

**new Chapter 7** means Chapter 7 of the *Rules* as in force immediately after the commencement date.

#### 11.5.2 Metrology procedures continues to apply until 31 December 2006

A metrology procedure as in force under the old Chapter 7 continues in force in accordance with the old Chapter 7 until 31 December 2006.

#### 11.5.3 Responsible person

A *Local Network Service Provider* who is the responsible person for a *metering installation* under Chapter 9 of the *Rules* immediately before the commencement date continues to be the *responsible person* for that *metering installation* for the purposes of clause 7.2.3.

#### 11.5.4 NEMMCO's responsibility to develop a metrology procedure

- (a) Subject to this clause 11.5.4, *NEMMCO* must *publish* an initial metrology procedure by 1 January 2007 in accordance with the new Chapter 7 and this procedure must commence operation on 1 January 2007.
- (b) The requirement in clause 7.14.1(b) that requires a minimum period of 3 months between the date the *metrology procedure* is published and the date the *metrology procedure* commences does not apply to the initial metrology procedure developed and published under this clause 11.5.4.
- (c) Any action taken by *NEMMCO* for the purpose of developing and publishing an initial metrology procedure prior to the commencement date is taken to satisfy the equivalent actions required for a *metrology procedure* under the new Chapter 7.

- (d) *NEMMCO* may dispense with, or not comply with, any relevant action under rule 7.14, if the action duplicates or is consistent with action that has already been taken under paragraph (c).
- (e) An initial metrology procedure developed and published under this clause 11.5.4 is taken to be the *metrology procedure* for the purposes of Chapter 7 of the *Rules*.
- (f) The initial metrology procedure is not required to incorporate the matters referred to in clause 7.14.1(c)(4) until 30 June 2008 and *NEMMCO* may develop a separate procedure for those matters during that period to 30 June 2008.

### 11.5.5 Jurisdictional metrology material in the metrology procedure

- (a) For the purposes of this clause 11.5.5, **expiry date** means 1 January 2009.
- (b) Until the expiry date, the *Ministers of the MCE* is taken to be each *Minister of the participating jurisdictions*, acting on behalf of that jurisdiction and undertaking the role of the *Ministers of the MCE* in relation to *jurisdictional metrology material* under clause 7.14.2.
- (c) For the avoidance of doubt, a *Minister of a participating jurisdiction* may delegate the role of submitting *jurisdictional metrology material* to *NEMMCO* under paragraph (b) by instrument in writing.
- (d) A certified copy of any delegation given under paragraph (c) must be provided to *NEMMCO* at the time any *jurisdictional metrology material* is submitted to *NEMMCO* under clause 7.14.2.

[**Note:** Ministers of participating jurisdiction have powers of delegation under their own jurisdictional legislation governing the procedure for conferring such delegations.]

## Part E Economic Regulation of Transmission Services (2006 amendments)

### 11.6 Rules consequent on making of the National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006

#### 11.6.1 Definitions

Subject to this rule 11.6, in this rule 11.6:

**Amending Rule 2006** means the National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006.

**commencement date** means the date on which the *Amending Rule 2006* commences operation.

**current regulatory control period** means the regulatory control period applicable to an existing revenue determination.

**distribution matters** includes matters relating to the economic regulation of *distribution services*, including, but not limited to, existing determinations, decisions, instruments, agreements or any other relevant action.

**ElectraNet** means ElectraNet Pty Ltd ACN 094 482 416 trading as ElectraNet.

**existing revenue determination** means any determination made, or deemed to be made, by the *ACCC* or the *AER* on or prior to the commencement date for the purpose of regulating the revenues of a *Transmission Network Service Provider*.

**first regulatory control period** means a *regulatory control period* immediately after a current regulatory control period.

**first revenue cap determination** means the first *revenue cap determination* after an existing revenue cap determination.

**new Chapter 6A** means Chapter 6A of the *Rules* as in force immediately after the commencement of the *Amending Rule 2006*.

**old Chapter 6** means Chapter 6 of the *Rules* as in force immediately before the commencement of the *Amending Rule 2006*.

**old clause 6.5.9** means clause 6.5.9 of the *Rules* as in force immediately before the commencement of the *Amending Rule 2006*.

**old Part C** means Part C (Transmission Pricing) of Chapter 6 of the *Rules* as in force immediately before the commencement of the *Amending Rule 2006*.

**old Part F** means Part F (Interconnections) of Chapter 6 of the *Rules* as in force immediately before the commencement of the *Amending Rule 2006*.

**relevant action** includes (without limitation) any of the following actions in relation to *distribution* matters:

- (a) the performance or exercise of any function, power, obligation or right;
- (b) the making or publishing of any guideline, standard, procedure, report, negotiating framework or other document;
- (c) the giving, publishing, service or receipt of any communication, notice or other document;
- (d) the provision or receipt of any submission or information;

- (e) the making or receiving any inquiry, request or application;
- (f) the undertaking or completion of any transaction;
- (g) the payment of any monetary amount or fee.

**renumbered Chapter 6** means Chapter 6 of the *Rules* as in force immediately after the commencement of the *Amending Rule 2006*.

**SP AusNet** means SPI PowerNet Pty Ltd ACN 079 798 173.

**Statement of Regulatory Principles** means the Statement of Principles published by the *AER* as part of the Compendium of Electricity Transmission Regulatory Guidelines dated August 2005.

**VENCorp** means the Victorian Energy Networks Corporation established under the Gas Industry Act 1994 (Vic) and continued under the Gas Industry Act 2001 (Vic).

#### **11.6.2 New Chapter 6A does not affect existing revenue determinations**

- (a) Subject to this rule 11.6, the old Chapter 6 continues to apply to and in respect of, existing revenue determinations as if the new Chapter 6A had not been made.
- (b) The Amending Rule 2006 has no effect on the continuing operation of clause 9.8.4G.
- (c) The Amending Rule 2006 has no effect on the continuing operation of clause 9.16.5 in so far as it:
  - (1) applies to deem a revenue cap for the *financial year* commencing on 1 July 2004;
  - (2) specifies the basis on which prices for certain transmission services during the *financial year* commencing on 1 July 2004 are to be determined;
  - (3) specifies the manner in which clause 6.4.3C of the old Chapter 6 is to apply for the *financial year* commencing on 1 July 2005; and
  - (4) deems a revenue cap for the period commencing on 1 July 2004 until the end of 30 June 2009 to be for a period of five years.

#### **11.6.3 Old Part C and Schedules 6.2, 6.3, 6.4, 6.7 and 6.8 of old Chapter 6**

Subject to this rule 11.6 and rule 11.8, old Part C (including Schedules 6.2, 6.3, 6.4, 6.7 and 6.8) continues to apply for the duration of a current regulatory control period.

#### **11.6.4 Old Part F of Chapter 6**

Subject to this rule 11.6, old Part F of Chapter 6 continues to apply for the duration of a current regulatory control period.

#### **11.6.5 Application of new Chapter 6A to Transmission Network Service Providers**

Subject to this rule 11.6, a *Transmission Network Service Provider* is not required to submit a *Revenue Proposal* or a proposed *negotiating framework* to the AER under the new Chapter 6A until a date that is 13 months before the expiry of a current regulatory control period.

#### **11.6.6 Application of Chapter 6 to old distribution matters**

- (a) The restructuring and renumbering of provisions of the old Chapter 6 by the *Amending Rule 2006* does not affect:
  - (1) *distribution* matters occurring or in existence before the commencement date; or
  - (2) anything done or omitted to be done in respect of *distribution* matters before the commencement date.
- (b) Without limiting paragraph (a), anything done or omitted to be done under a provision of the old Chapter 6 in respect of *distribution* matters before the commencement date is deemed to have been done or omitted to be done under the corresponding provision of that Chapter as restructured and renumbered by the *Amending Rule 2006*, as if that Rule had been in operation when the thing was done or omitted to be done.

#### **11.6.7 References to the old Chapter 6**

Unless the context otherwise requires, on and from the commencement date every reference to the old Chapter 6 in a document (however described) is deemed to be a reference to the renumbered Chapter 6 or the new Chapter 6A (as the case may be).

#### **11.6.8 References to provisions of the old Chapter 6**

Unless the context otherwise requires, on and from the commencement date every reference to a provision of the old Chapter 6 in a document (however described) is deemed to be a reference to the corresponding provision of the renumbered Chapter 6 or the corresponding provision (if any) of the new Chapter 6A (as the case may be).

### **11.6.9 Roll forward of regulatory asset base for first regulatory control period**

In making a *revenue determination* for the first *regulatory control period*, the value of the regulatory asset base at the beginning of the first *regulatory year* of that period calculated in accordance with clause S6A.2.1(f), may be adjusted having regard to an existing revenue determination and any other arrangements agreed between the *AER* and the *Transmission Network Service Provider*.

### **11.6.10 Other adjustment carry-over mechanisms from current to first regulatory control period**

The *maximum allowed revenue* that a *Transmission Network Service Provider* may earn in any *regulatory year* of the first *regulatory control period* may be adjusted for any carry-over mechanisms provided for in the relevant existing revenue determination and in any other arrangements agreed between the *AER* and the *Transmission Network Service Provider* for the purposes of, and in accordance with, the existing revenue determination.

### **11.6.11 Clause consequent upon making National Electricity Amendment (Cost Allocation Arrangements for Transmission Services) Rule No 2009 No 3 - Transition to new Chapter 6A: existing prescribed connection services**

#### **Definitions**

(a) In this clause 11.6.11:

**existing asset** means an asset that as at 9 February 2006:

- (1) was used in connection with a *transmission system* where the value, or a portion of the value, of that asset was included in the regulatory asset base; or
- (2) was committed to be constructed for use in connection with a *transmission system* where the forecast value, or a portion of the forecast value, of that asset was included in the forecast capital expenditure,

for that *transmission system* under a revenue determination in force as at 9 February 2006.

For the purpose of this definition, an asset is, and is only, to be taken to be committed to be constructed if it satisfied the criteria which a project needed to satisfy to be a “committed project” for the purpose of the *regulatory test* in force as at 9 February 2006.

**replacement asset** means:

- (1) an asset which replaces an existing asset after 9 February 2006; or

- (2) an asset which replaces an asset referred to in this clause 11.6.11(a) after 9 February 2006.

For the purpose of this definition, an asset will be treated as replacing another asset even if it provides an increased or different functionality to the asset it replaces, provided that the increased or different functionality was not requested by the relevant *Transmission Network User*.

**eligible asset** means, subject to clause 11.6.11(d)(3):

- (1) an existing asset which was, immediately before the commencement date, or was or is, when first commissioned after the commencement date, wholly and exclusively used by a *Transmission Network Service Provider* to provide *connection services* to a *Transmission Network User* or a group of *Transmission Network Users* at a *transmission network connection point*; and
- (2) a replacement asset which is wholly and exclusively used after the commencement date by a *Transmission Network Service Provider* to continue providing *connection services* to a *Transmission Network User* or a group of *Transmission Network Users* at a *transmission network connection point*,

and excludes:

- (3) an existing asset or a replacement asset to the extent that it ceases to be used after the commencement date to provide *connection services* to a *Transmission Network User* or a group of *Transmission Network Users* at a *transmission network connection point*; and
- (4) an existing asset or replacement asset that, as at the 2009 commencement date, was wholly and exclusively used by a *Transmission Network Service Provider* to provide connection services to a *Transmission Network User* or a group of *Transmission Network Users* at a *transmission network connection point* but had all of its costs treated as directly attributable to, or incurred in providing, *transmission use of system services* at that date.

**prescribed connection service** means a *connection service* provided by a *Transmission Network Service Provider* to a *Transmission Network User* at a *transmission network connection point* on or after the 2009 commencement date in respect of which the following criteria are satisfied:

- (1) the relevant service is provided by using assets that include eligible assets;



- (2) the whole of the relevant service is being provided under a *connection agreement* which was first entered into before the commencement date (as extended, amended or novated from time to time);
- (3) the *connection agreement* has not at any time after the 2009 commencement date been amended at the request of the *Transmission Network User* for the purposes of altering the relevant service; and
- (4) the relevant service would not otherwise be a *prescribed transmission service* for the purposes of new Chapter 6A but for this clause 11.6.11.

If, at the date a *Transmission Network Service Provider* submits a *Revenue Proposal* after the 2009 commencement date to the AER under new Chapter 6A, a *connection service* does not satisfy each of the above criteria, then the *connection service* remains a prescribed connection service until the start of the next *regulatory control period* to which the *Revenue Proposal* relates, from which time it ceases to be a prescribed connection service.

**2009 commencement date** means the date on which the National Electricity Amendment (Cost Allocation Arrangements for Transmission Services) Rule 2009 commences operation.

#### **Prescribed transmission services**

- (b) References to *prescribed transmission services* in new Chapter 6A include prescribed connection services and, where a service is a *prescribed transmission service* by virtue of the operation of this clause 11.6.11, that service is taken not to be a *negotiated transmission service*.

#### **Interaction with new Chapter 6A**

- (c) For the purposes of new Chapter 6A:
  - (1) the costs of the *transmission system* assets that from time to time may be treated as:
    - (i) directly attributable to the provision of a prescribed connection service; or
    - (ii) incurred in providing a prescribed connection service,  
  
to a *Transmission Network User* or a group of *Transmission Network Users* at a *transmission network connection point* are limited to the costs of the eligible assets which, from time to time, provide that prescribed connection service;
  - (2) any costs of an existing asset or a replacement asset (or of any portion of an existing asset or a replacement asset) that:

- (i) is not an eligible asset (other than as a result of clause 11.6.11(d)); and
- (ii) is used by a *Transmission Network Service Provider* to provide *connection services* to a *Transmission Network User* or a group of *Transmission Network Users* at a *transmission network connection point*,

must be treated as costs that are directly attributable to the provision of, or are incurred in providing, *prescribed TUOS services* and, to avoid doubt, the services provided by those assets which would otherwise be *connection services* are taken to be *prescribed TUOS services*; and

- (3) the *stand-alone amount* for *prescribed TUOS services* is taken to include any portion of the costs referred to in clause 11.6.11(c)(2) that has not been allocated under clause 6A.23.2(d)(1).

#### **Cessation of prescribed connection services**

- (d) If a *connection service* ceases to be a prescribed connection service at the start of a *regulatory control period* for the relevant *Transmission Network Service Provider*:
  - (1) the *connection service* is taken to be a *negotiated transmission service*;
  - (2) despite clause 6A.19.2(7), the costs which were allocated to the prescribed connection service may be reallocated to *negotiated transmission services*;
  - (3) the eligible assets that previously provided the prescribed connection service cease to be eligible assets; and
  - (4) despite clause S6A.2.3, the value of the eligible assets which previously provided the prescribed connection service may be removed from the regulatory asset base of the *Transmission Network Service Provider*.

### **11.6.12 Powerlink transitional provisions**

#### **Definitions**

- (a) In this clause 11.6.12:

**contingent project** means a project identified in the transitional revenue determination as a contingent project.

**Powerlink** means the Queensland Electricity Transmission Corporation Limited (ACN 078 849 233), trading as Powerlink Queensland .

**transitional regulatory control period** means the regulatory control period commencing on 1 July 2007 and ending on 30 June 2012.

**transitional revenue determination** means a final revenue determination by the *AER* for the Powerlink transmission network, in respect of the transitional regulatory control period.

**trigger** means the unique investment driver identified in the transitional revenue determination as a trigger for a contingent project.

### Scope and application

- (b) This clause 11.6.12:
  - (1) applies only in respect of the Powerlink *transmission network* and applies only until 30 June 2012; and
  - (2) prevails, to the extent of any inconsistency, over any other clause in the *Rules*.

### Transitional revenue determination

- (c) Except as provided in this clause 11.6.12, and despite any changes to the old Chapter 6:
  - (1) the old Chapter 6 continues to apply in respect of the *AER* setting the revenue cap for the transitional regulatory control period for the Powerlink *transmission network*; and
  - (2) in setting the revenue cap for the transitional regulatory control period, the *AER* must substantially adhere to the Statement of Regulatory Principles including the ex ante approach to setting the revenue cap set out in the statement.
- (d) The *AER* must calculate the *weighted average cost of capital* for the transitional regulatory control period, in accordance with the values, methodologies or benchmarks in the new Chapter 6A, in respect of the following items:
  - (1) the nominal risk free rate including the maturity period and source of the benchmark;
  - (2) the debt risk premium including the maturity period and source of the benchmark;
  - (3) the equity beta;

- (4) the market risk premium; and
  - (5) the ratio of the market value of debt as a proportion of the market value of equity and debt.
- (e) In calculating the *WACC* for the transitional regulatory control period, the *AER* must use an average gamma of 0.5.

**Contingent projects**

- (f) Where the trigger event identified in respect of a contingent project occurs prior to 30 June 2012, the *AER* must, in accordance with the transitional revenue determination:
- (1) determine:
    - (i) the amount of capital and incremental operating expenditure for that contingent project for each remaining regulatory year of the transitional regulatory control period, which the *AER* considers is reasonably required for the purpose of undertaking the contingent project;
    - (ii) the likely commencement and completion dates for the contingent project;
    - (iii) the incremental revenue which is likely to be earned by Powerlink in each remaining regulatory year of the transitional regulatory control period as a result of the contingent project being undertaken; and
    - (iv) the *maximum allowed revenue* for each regulatory year in the remainder of the transitional regulatory control period by adding the incremental revenue for that regulatory year; and
  - (2) calculate the estimate referred to in subparagraph (1)(iii):
    - (i) on the basis of the rate of return for Powerlink for the transitional regulatory control period in accordance with the transitional revenue determination; and
    - (ii) consistently with the manner in which depreciation is calculated under the transitional revenue determination; and
  - (3) amend the transitional revenue determination to apply for the remainder of the transitional regulatory control period in accordance with paragraph (g).
- (g) The *AER* may only vary the transitional revenue determination to the extent necessary:

- (1) to adjust the forecast capital expenditure for the transitional regulatory control period to accommodate the amount of additional capital expenditure determined under paragraph (f)(1)(i);
  - (2) to adjust the forecast operating expenditure for the current regulatory control period to accommodate the amount of additional operating expenditure determined under paragraph (f)(1)(i); and
  - (3) to reflect the effect of any resultant increase in forecast capital expenditure and incremental operating expenditure on the maximum allowed revenue for each regulatory year in the remainder of the transitional regulatory control period.
- (h) An application for approval of a contingent project may only be made if the intended date for commencing the contingent project is during the transitional regulatory control period.
- (i) For the first *regulatory control period* after the transitional regulatory control period, the forecast of capital expenditure for that first *regulatory control period* must be determined by applying the provisions of clause 6A.6.7 of the new Chapter 6A, in respect of the capital expenditure for a contingent project, with such modifications as are necessary to properly apply clause 6A.6.7.

#### **Cost pass-through**

- (j) For the duration of the transitional regulatory control period:
- (1) subject to subparagraph (2), clause 6A.7.2 of the new Chapter 6A applies to a *network support event* under the transitional revenue determination;
  - (2) the process to apply to the calculation, presentation and approval of pass through resulting from a *network support event* is as set out in the transitional revenue determination; and
  - (3) in respect of any *positive change event* or *negative change event*, the new Chapter 6A applies, with any modifications that are necessary to apply the relevant provisions to the transitional revenue determination.

#### **Roll forward of regulatory asset base**

- (k) For the avoidance of doubt, in making a *revenue determination* for the first *regulatory control period* after the transitional regulatory control period, the value of the regulatory asset base at the beginning of the first *regulatory year* of that period calculated in accordance with clause S6A.2.1(f), may be adjusted having regard to the transitional revenue determination and any other arrangements agreed between the *AER* and Powerlink.

### **Application of efficiency benefit sharing scheme**

- (l) The *efficiency benefit sharing scheme* in force under clause 6A.6.5 applies to Powerlink during the transitional regulatory control period.

### **Power to re-open transitional revenue determination**

- (m) Clause 6A.7.1 applies to the transitional revenue determination, and a reference in the clause to:
  - (1) “revenue determination” is taken to be a reference to the transitional revenue determination;
  - (2) “regulatory control period” is taken to be a reference to the transitional regulatory control period;
  - (3) “contingent project” has the meaning referred to in paragraph (a); and
  - (4) “X Factor” has the same meaning as in the transitional revenue determination.
- (n) Subject to rule 11.8, old Part C (including Schedules 6.2, 6.3, 6.4, 6.7 and 6.8 of old Chapter 6) continues to apply for the duration of the transitional regulatory control period

### **11.6.13 ElectraNet easements transitional provisions**

- (a) In this clause 11.6.13:

**current regulatory control period** means the regulatory control period for ElectraNet commencing on 1 January 2003 and ending on 30 June 2008.

**Determination** means the South Australian Transmission Network Revenue Cap Decision of the ACCC dated 11 December 2002.

**easement** means easements referred to in the Determination.

- (b) Without limiting the operation of the new Chapter 6A, in establishing the opening regulatory asset base for ElectraNet for the regulatory control period subsequent to ElectraNet’s current regulatory control period, the *AER* may also consider adjustments to the regulatory asset base for ElectraNet that relate to easements, as agreed by letter dated 3 August 2004, between the ACCC and ElectraNet.

### **11.6.14 TransGrid contingent projects**

- (a) In this clause 11.6.14:

**contingent project** means a project identified in the Determination as a contingent project.

**current regulatory control period** means the period 1 July 2004 to 30 June 2009.

**Determination** means the “Final Decision, NSW and ACT Transmission Network Revenue Cap TransGrid 2004-05 to 2008-09” dated 27 April 2005 determined by the ACCC pursuant to clause 6.2.4(b) of the National Electricity Code.

**TransGrid** means the energy services corporation constituted under section 6A of the Energy Services Corporations Act 1995 (NSW) and specified in Part 1A of Schedule 1 to that Act.

- (b) For the purposes of the application of clause 11.6.2(a) to the Determination, a reference to the old Chapter 6 is a reference to the old Chapter 6 as modified by rule 8A.1.
- (c) For the first *regulatory control period* after the current regulatory control period, the forecast of capital expenditure for TransGrid for that first *regulatory control period* must be determined by applying the provisions of clause 6A.6.7 in respect of the capital expenditure for a contingent project, with such modifications as are necessary to properly apply clause 6A.6.7.

#### **11.6.15 Transmission determination includes existing revenue determinations**

The definition of a *transmission determination* may, where the context so requires, include a determination (or substituted determination) made, or deemed to be made, by the AER or the ACCC prior to the commencement date.

#### **11.6.16 References to regulatory control period**

A reference to a *regulatory control period* may, where the context so requires, include a period during which a revenue cap applied by virtue of a determination (or substituted determination) made, or deemed to be made, by the AER or the ACCC prior to the commencement date.

#### **11.6.17 Consultation procedure for first proposed guidelines**

- (a) In this clause 11.6.17:

**guideline** means:

- (1) the *post-tax revenue model* referred to in rule 6A.5.2;
- (2) the *roll forward model* referred to in rule 6A.6.1;

- (3) an *efficiency benefit sharing scheme* referred to in rule 6A.6.5;
  - (4) a *service target performance incentive scheme* referred to in rule 6A.7.4;
  - (5) *submission guidelines* referred to in rule 6A.10.2; and
  - (6) *Cost Allocation Guidelines* referred to in rule 6A.19.3.
- (b) The *AER* must develop and *publish* the first proposed guidelines on or before 31 January 2007, and may carry out consultation in the preparation of those proposed guidelines as the *AER* considers appropriate.
  - (c) Each proposed guideline must be *published* in accordance with the requirements of rule 6A.20(b), including an explanatory statement and an invitation for written submissions.
  - (d) The invitation for written submissions for the proposed guidelines must allow no less than 60 *business days* for the making of submissions.
  - (e) The *AER* may *publish* papers and hold conferences or information sessions in relation to the proposed guidelines as provided by rule 6A.20(d).
  - (f) Rule 6A.20(e)-(f) applies to the publication of the final decision of the *AER* in relation to the first guidelines, which must be published under rule 6A.20 on or before 30 September 2007.

#### **11.6.18 Reliance on proposed guidelines for SP AusNet, VENCORP and ElectraNet**

- (a) In this clause 11.6.18:
  - guideline** has the same meaning as in clause 11.6.17.
  - proposed guideline** means a proposed guideline published under clause 11.6.17.
  - relevant provider** means SP AusNet, VENCORP or ElectraNet.
  - 2008 determination** means a transmission determination to be made in 2008 for a relevant provider.
- (b) For the purposes of making a 2008 determination for the regulatory control period to be covered by a 2008 determination, anything that must be done in accordance with a guideline must instead be done in accordance with the corresponding proposed guideline.
- (c) Unless sooner revoked, a proposed guideline ceases to have effect in relation to a relevant provider at the end of the regulatory control period



covered by a 2008 determination applying to the provider. For the avoidance doubt, a proposed guideline does not apply to or in respect of the making of a subsequent transmission determination.

- (d) For the purposes of making a 2008 determination for the regulatory control period to be covered by a 2008 determination, a relevant provider is taken to have complied with a requirement to comply with a *Cost Allocation Methodology* under the new Chapter 6A if the AER is satisfied that the relevant provider has complied with the relevant proposed guideline for cost allocation referred to in clause 11.6.17(a)(6), but only until the AER has approved a *Cost Allocation Methodology* for that provider under clause 6A.19.4.

### 11.6.19 EnergyAustralia transitional provisions

- (a) In this clause 11.6.19:

**contingent project** means a project approved by the ACCC and identified in the Determination as a contingent project.

**current regulatory control period** means the period 1 July 2004 to 30 June 2009.

**Determination** means the “Final Decision, NSW and ACT Transmission Network Revenue Cap EnergyAustralia 2004-05 to 2008-09”.

**EnergyAustralia** means the energy services corporation constituted under section 7 of the Energy Services Corporations Act 1995 (NSW) and specified in Part 2 of Schedule 1 to that Act.

**maximum allowed revenue** means the maximum allowed revenue in the Determination.

**trigger event** means an event identified as a trigger in Appendix A of the Determination in respect of a contingent project.

**triggered contingent project** means the contingent project referred to in Appendix A of the Determination as “A.1 Replacement of Feeders 908/909”.

#### Application of Chapter 6A to Determination

- (b) Subject to paragraph (c), clauses 6A.7.1, 6A.7.2 and 6A.7.3 apply to the Determination from the commencement date.
- (c) In applying clause 6A.7.1 to the Determination, a reference in the clause to:
- (1) “revenue determination” is taken to be a reference to the Determination;

- (2) “regulatory control period” is taken to be a reference to the current regulatory control period;
- (3) “contingent project” has the meaning referred to in paragraph (a); and
- (4) “X Factor” has the same meaning as in the Determination.

### **Treatment of contingent projects**

- (d) Where the trigger event identified in respect of a contingent project occurs prior to 1 July 2009, the *AER* must, in accordance with the Determination:
  - (1) determine:
    - (i) the total capital expenditure which the *AER* considers is reasonably required for the purpose of undertaking the *contingent project* including any amount for forecast capital expenditure already included in the Determination in respect of the triggered contingent project;
    - (ii) the forecast capital and incremental operating expenditure for that contingent project (in addition to any amount for forecast capital expenditure already included in the Determination in respect of the triggered contingent project) for each remaining regulatory year of the current regulatory control period, which the *AER* considers is reasonably required for the purpose of undertaking the contingent project in accordance with Appendix A of the Determination;
    - (iii) the likely commencement and completion dates for the contingent project;
    - (iv) the incremental revenue which is likely to be earned by EnergyAustralia in each remaining regulatory year of the current regulatory control period as a result of the contingent project being undertaken; and
    - (v) the maximum allowed revenue for each regulatory year in the remainder of the current regulatory control period by adding the incremental revenue for that regulatory year;
  - (2) calculate the estimate referred to in subparagraph (1)(iv) in accordance with the Determination, including:
    - (i) on the basis of the rate of return for EnergyAustralia for the current regulatory control period; and
    - (ii) consistently with the manner in which depreciation is calculated under the Determination; and

- (3) vary the Determination to apply for the remainder of the current regulatory control period in accordance with paragraph (e).
- (e) The *AER* may only vary the Determination to the extent necessary:
    - (1) to adjust the forecast capital expenditure for the current regulatory control period to accommodate the amount of additional capital expenditure determined under paragraph (d)(1)(ii); and
    - (2) to adjust the forecast operating expenditure for the current regulatory control period to accommodate the amount of additional operating expenditure determined under paragraph (d)(1)(ii); and
    - (3) to reflect the effect of any resultant increase in forecast capital expenditure and incremental operating expenditure on the maximum allowed revenue for each regulatory year in the remainder of the current regulatory control period.
  - (f) The intended date for commencing the contingent project must be during the current regulatory control period.
  - (g) For the first *regulatory control period* after the current regulatory control period, the forecast of capital expenditure for EnergyAustralia for that first *regulatory control period* must be determined by applying the provisions of clause 6A.6.7 in respect of the capital expenditure for a contingent project, with such modifications as are necessary to properly apply clause 6A.6.7.

## 11.6.20 Basslink transitional provisions

### Definitions

- (a) In this clause 11.6.20:

**Basslink** has the meaning provided in the *Electricity Supply Industry Act 1995* of Tasmania, and means the interconnection between the electricity grids of the States of Tasmania and Victoria by means of:

- (1) a high voltage, direct current, submarine cable across Bass Strait;
- (2) converter stations in those States;
- (3) direct current connecting lines to those converter stations;
- (4) alternating current transmission connections to the transmission networks of those States; and
- (5) related infrastructure.

**previous regulatory approach** means the methodologies, objectives and principles for determination of a regulatory asset base applied in the previous regulatory determinations.

**previous regulatory determinations** means the decision (including the reasons for decision) made under clause 2.5.2(c) of the National Electricity Code or clause 2.5.2(c) of the *Rules* (as the case may be):

- (1) by the *ACCC*, entitled the “Murraylink Transmission Company Application for Conversion and Maximum Allowable Revenue” dated 1 October 2003; and
- (2) by the *AER*, entitled “Directlink Joint Ventures’ Application for Conversion and Revenue Cap” dated 3 March 2006.

### Application

- (b) Where, after the commencement date, a service provided by means of, or in connection with, the Basslink *transmission system* ceases to be classified as a *market network service*:
  - (1) paragraph (c) applies to that service to the exclusion of clause 2.5.2(c); and
  - (2) paragraphs (d),(e),(f) and (g) apply to that service to the exclusion of clause S6A.2.1(e)(1) and (2).
- (c) If, after the commencement date, a *network service* provided by means of, or in connection with, the Basslink *transmission system* ceases to be classified as a *market network service*, it may at the discretion of the *AER* be determined to be a *prescribed transmission service*, in which case the relevant *total revenue cap* may be adjusted in accordance with Chapter 6A and this clause 11.6.20 to include to an appropriate extent the relevant *network elements* which provide those *network services*.
- (d) Where services are determined to be *prescribed transmission services* as referred to in paragraph (c), the value of the regulatory asset base, as at the beginning of the first *regulatory year* of the first *regulatory control period* for which those *prescribed transmission services* are to be regulated under a *revenue determination*, is the amount that is determined by the *AER* in accordance with paragraphs (e), (f) and (g).
- (e) Subject to paragraph (f), the *AER* must determine the value of the regulatory asset base for the Basslink *transmission system* for the purposes of paragraph (d) by applying the previous regulatory approach to the circumstances of that *transmission system*.
- (f) In the event of an inconsistency between the previous regulatory approach adopted in each of the previous regulatory determinations, the approach

adopted in a decision of the *AER* regarding the *Directlink transmission system* prevails over the approach adopted in the decision of the *ACCC* regarding the *Murraylink transmission system* to the extent of the inconsistency.

- (g) Without limiting paragraph (e), the *AER* must, when exercising any discretion in relation to the application of paragraph (e) above:
  - (1) have regard to the prudent and efficient value of the assets that are used by the relevant *Transmission Network Service Provider* to provide those *prescribed transmission services* (but only to the extent that those assets are used to provide such services); and
  - (2) for this purpose, determine that value having regard to the matters referred to in clause S6A.2.2.

### 11.6.21 SPI Powernet savings and transitional provision

#### Definitions

- (a) In this clause 11.6.21:

**easements tax change event** means a *change* in the amount of land *tax* that is payable by SPI PowerNet in respect of the easements which are used for the purposes of SPI PowerNet's *transmission network*. For the purposes of this definition, the *change* in the amount of land tax that is payable by SPI PowerNet must be calculated as the difference between:

- (1) the amount of land tax that is payable in each *regulatory year* by SPI PowerNet, as advised by the Commissioner of State Revenue, Victoria; and
- (2) the amount of land tax which is forecast for the purposes of and included in the *revenue determination* for each *regulatory year* of the *regulatory control period*.

**Regulated owner** and **SPI PowerNet** both have the meaning provided in clause 9.3.1(2) of the *Rules*.

#### Transition to new Chapter 6A: existing prescribed transmission services

- (b) Notwithstanding clause 11.5.11, references to *prescribed transmission services* in the new Chapter 6A include a service provided by an asset used in connection with, or committed to be constructed for use in connection with, a *transmission system* as at 9 February 2006, where that asset is the subject of an agreement between SPI PowerNet and any of:
  - (1) VENC Corp;

- (2) a Distributor;
  - (3) a Regulated owner;
  - (4) a *Generator*; or
  - (5) a *Market Network Service Provider*,
- and:
- (6) the agreement provides or contemplates that following an interim period the relevant asset will become subject to regulation under a revenue determination applicable to SPI PowerNet; and
  - (7) in the case of an agreement with a *Generator* or a *Market Network Service Provider*, the service the subject of the agreement is for *connection assets* provided on a non-contestable basis.

#### **Method of adjustment of value of regulatory asset base**

- (c) For the avoidance of doubt, in adjusting the previous value of the regulatory asset base for SPI PowerNet's *transmission system* as required by clause S6A.2.1(f), the previous value of the regulatory asset base must be increased by the amount of capital expenditure specified in, or that forms the basis of, agreements pursuant to which SPI PowerNet constructed assets during the previous regulatory control period used to provide *prescribed transmission services*, adjusted for outturn inflation and depreciation in accordance with the terms of those agreements.
- (d) For the purposes of a *revenue determination* for SPI PowerNet (including but not limited to, a 2008 determination as defined in clause 11.6.18(a)) and clause 6A.7.3, easements tax change event is deemed to be:
  - (1) a *pass through event*; and
  - (2) a *positive change event* or *negative change event*, as the case may be, whether or not the easements tax change event would be *material* for the purposes of those definitions.

#### **11.6.22 Interim arrangements pricing-related information**

- (a) Clause 6.2.5(a1) as in force immediately before the commencement date continues to apply during the current regulatory control period.
- (b) The *information guidelines* may, in addition to the matter referred to in clause 6A.17.2(e), require the inclusion in the certified annual statements of:
  - (1) information on the amount of each instance, during the relevant reporting period, of any reduction in the prices payable by a

*Transmission Customer* for prescribed transmission services provided by the *Transmission Network Service Provider*;

- (2) information on each instance, during the relevant reporting period, of a reduction in the prices payable by a *Transmission Customer* for prescribed transmission use of system services or prescribed common transmission services (or both) that were recovered from other *Transmission Customers* for prescribed transmission use of system services or prescribed common transmission services; and
- (3) information to substantiate any claim by the *Transmission Network Service Provider* that the information provided to the *AER* with respect to reductions in the prices payable by a *Transmission Customer* for the relevant prescribed transmission services under subparagraphs (2) or (3) is confidential information.

## Part F Reform of Regulatory Test Principles (2006 amendments)

### 11.7 Rules consequent on making of the National Electricity Amendment (Reform of the Regulatory Test Principles) Rule 2006 No.19

#### 11.7.1 Definitions

For the purposes of this rule 11.7:

**Amending Rule** means the National Electricity Amendment (Reform of the Regulatory Test Principles) Rule 2006 No.19.

**commencement date** means the date on which the Amending Rule commences operation.

**current application** means any action taken or process commenced under the *Rules*, which relies on or is referenced to, the *regulatory test*, and is not completed as at the commencement date.

**new clause 5.6.5A** means clause 5.6.5A of the *Rules* as in force immediately after the commencement of the Amending Rule.

**old clause 5.6.5A** means clause 5.6.5A of the *Rules* as in force immediately before the commencement of the Amending Rule.

**transitional application** means any action taken or process commenced under the *Rules*, which relies on or is referenced to, the *regulatory test* and is not completed on 31 December 2007, or the date on which amendments (if any) to the *regulatory test* commence, whichever is the earlier.

### 11.7.2 Amending Rule does not affect old clause 5.6.5A

- (a) On the commencement date, the *regulatory test* promulgated by the AER in accordance with the old clause 5.6.5A and in effect immediately before the commencement date, continues in effect and is taken to be consistent with the new clause 5.6.5A until 31 December 2007.
- (b) Old clause 5.6.5A, and the *regulatory test* promulgated under that clause 5.6.5A, continues to apply to and in respect of, any current application and any transitional application.

## Part G Pricing of Prescribed Transmission Services (2006 amendments)

### 11.8 Rules consequent on making the National Electricity Amendment (Pricing of Prescribed Transmission Services) Rule 2006

#### 11.8.1 Definitions

Subject to this rule 11.8, in this rule 11.8:

**agreed interim requirements** means interim requirements that are equivalent to the requirements of the *pricing methodology guidelines* referred to in rule 6A.25 and have been developed in consultation with the relevant providers for the purposes of a proposed 2008 pricing methodology.

**ElectraNet** means ElectraNet Pty Ltd ACN 094 482 416 trading as ElectraNet.

**existing assets** means *transmission system* assets in existence as at 24 August 2006.

**previous regulatory determinations** means the decision (including the reasons for decision) made under clause 2.5.2(c) of the National Electricity Code or clause 2.5.2(c) of the *Rules* (as the case may be):

- (1) by the ACCC, entitled the “Murraylink Transmission Company Application for Conversion and Maximum Allowable Revenue” dated 1 October 2003; and
- (2) by the AER, entitled “Directlink Joint Ventures’ Application for Conversion and Revenue Cap” dated 3 March 2006.

**Pricing Rule commencement date** means the date on which the National Electricity Amendment (Pricing of Prescribed Transmission Services) Rule 2006 commences operation.

**relevant provider** means SPAusNet, ElectraNet or VENCORP.



**SPAusNet** means SPI PowerNet Pty Ltd ACN 079 798 173.

**2008 pricing methodology** means a pricing methodology to be made in 2008 for a relevant provider.

**VENCorp** means the Victorian Energy Networks Corporation established under the Gas Industry Act 1994(Vic) and continued under the Gas Industry Act 2001(Vic).

### **11.8.2 Regulated interconnectors**

- (a) All *interconnectors* that formed part of the *power system* in the *participating jurisdictions* as at 31 December 1997 continue to be taken to be *regulated interconnectors*.
- (b) All *interconnectors* that ceased to be classified as a *market network service* by a previous regulatory determination made before 28 December 2006 are taken to be *regulated interconnectors*.
- (c) All *interconnectors* that, by a decision made after 28 December 2006 under clause 2.5.2(c) of the *Rules* cease to be classified as a *market network service* are taken to be *regulated interconnectors*.

### **11.8.3 Application of new Part J of Chapter 6A to Transmission Network Service Providers**

- (a) Subject to this rule 11.8, a *Transmission Network Service Provider* is not required to submit a proposed *pricing methodology* to the *AER* under the new Part J of Chapter 6A until a date that is 13 months before the expiry of a current *regulatory control period*.
- (b) For the purposes of this clause 11.8.3, the transitional regulatory control period referred to in rule 11.6.12 (a) for Powerlink is taken to be the current *regulatory control period*.

### **11.8.4 Reliance on agreed interim guideline for ElectraNet, SPAusNet, and VenCorp**

For the purpose of making a 2008 pricing methodology, anything that must be done in accordance with the *pricing methodology guidelines* must instead be done in accordance with the agreed interim requirements.

### **11.8.5 Prudent discounts under existing agreements**

- (a) A *Transmission Network Service Provider* may continue to recover discounts arising as a result of agreements that were entered into prior to 10 October 2001 so long as the agreement remains in effect and its terms are not renegotiated.

- (b) A *Transmission Network Service Provider* may continue to recover discounts arising as a result of agreements that were entered into prior to 28 December 2006 so long as the agreement remains in effect and its terms are not renegotiated.
- (c) The *AER* is not required to re-approve discounts arising under paragraphs (a) or (b) that were approved prior to 28 December 2006, and any approval for the recovery of such discounts is valid so long as the agreement between the *Transmission Network Service Provider* and the *Transmission Customer* remains in effect and its terms are not renegotiated.

#### **11.8.6 Application of prudent discounts regime under rule 6A.26**

- (a) Despite clause 11.6.3, a *Transmission Network Service Provider* may apply rule 6A.26 during a current regulatory control period (as defined in clause 11.6.1).
- (b) Where a *Transmission Network Service Provider* applies to the *AER* under clause 6A.26.2 for approval to recover a proposed recovery amount in circumstances where paragraph (a) applies, the *AER* must make a determination in accordance with clause 6A.26.2 notwithstanding that there is no approved *pricing methodology* for that provider.

#### **11.8.7 Prudent discounts pending approval of pricing methodology**

- (a) This clause 11.8.7 applies where:
  - (1) a *Transmission Network Service Provider* has submitted or resubmitted a proposed *pricing methodology* to the *AER* under clause 6A.10.1, 6A.11.2 or 6A.12.3;
  - (2) the *AER* has not made a final decision approving or amending that methodology under rule 6A.13; and
  - (3) a *Transmission Customer* requests the provider to charge lower prices for *prescribed TUOS services* or *prescribed common transmission services* than the prices determined in accordance with the provider's *pricing methodology* as referred to in clause 6A.26.1(d).
- (b) Despite clause 6A.26.1, a *Transmission Network Service Provider* may agree to charge lower prices for *prescribed TUOS services* or *prescribed common transmission services* than the prices determined as referred to in clause 6A.26.1(d) in accordance with:
  - (1) in the case where the *AER* has made a draft decision in which it proposes to approve a proposed *pricing methodology*, - that proposed *pricing methodology*; or

- (2) if subparagraph (1) does not apply, the *pricing methodology* most recently approved for that *Transmission Network Service Provider* prior to the proposed *pricing methodology* referred to in subparagraph (a)(1); or
  - (3) if there is no a previously approved *pricing methodology* for that *Transmission Network Service Provider*, - the previous method used by the *Transmission Network Service Provider* to establish prices, however determined must be used in place of an approved *pricing methodology*.
- (c) Where a *Transmission Network Service Provider* applies to the AER under clause 6A.26.2 for approval to recover a proposed recovery amount in circumstances where paragraphs (a) and (b) apply, the AER must make a determination in accordance with clause 6A.26.2 notwithstanding that the reduced charges were agreed before a *pricing methodology* was approved.
- (d) The subsequent approval by the AER of a *pricing methodology* for a *Transmission Network Service Provider* does not require the provider to adjust, reverse or recompense any amounts to *Transmission Customers* in connection with charges for services established pursuant to this clause 11.8.7.

## Part H Reallocations (2007 amendments)

### 11.9 Rules consequent on the making of the National Electricity Amendment (Reallocations) Rule 2007

#### 11.9.1 Definitions

For the purposes of this rule 11.9:

**Amending Rule** means the National Electricity Amendment (Reallocations) Rule 2007.

**commencement date** means the day on which the Amending Rule commences operation.

**existing reallocation** means a *reallocation* in place immediately before the commencement date.

**new reallocation** means a *reallocation* undertaken in accordance with the *Rules* after the date of *publication* of the *reallocation procedures* under clause 3.15.11A(d).

**transitional reallocation** means a *reallocation* in place immediately after the commencement date but prior to the date of *publication* of the *reallocation procedures* by NEMMCO under clause 3.15.11A(d).

### 11.9.2 Existing and transitional reallocations

- (a) Subject to paragraph (c), an existing reallocation is to be treated as if the Amending Rule had not been made.
- (b) Subject to paragraph (c), a transitional reallocation is to be treated as if the Amending Rule had not been made.
- (c) A *Market Participant* who is a party to an existing reallocation or a transitional reallocation may elect to have the reallocation treated as a new reallocation if the participant obtains the agreement of the *Market Participant* who is the other party to the reallocation.

## Part I Technical Standards for Wind Generation (2007 amendments)

### 11.10 Rules consequent on making of the National Electricity Amendment (Technical Standards for Wind Generation and other Generator Connections) Rule 2007

#### 11.10.1 Definitions

Subject to this rule 11.10, in this rule 11.10:

**Amending Rule** means the National Electricity Amendment (Technical Standards for Wind Generation and other Generator Connections) Rule 2007.

**commencement date** means the date on which the Amending Rule commences operation.

**new Chapter 5** means Chapter 5 of the *Rules* in force immediately after the commencement date.

**old Chapter 5** means Chapter 5 of the *Rules* in force immediately prior to the commencement date.

#### 11.10.2 Provision of information under S5.2.4 in registration application

- (a) Any requirements in the Amending Rule that require a person who is applying to be a *Registered Participant* to submit information in relation to clause S5.2.4 for the purposes of clause 2.9.2 does not apply to any person who has, in accordance with clause 2.9.1:
  - (1) submitted an application to be registered as a *Registered Participant*;
  - (2) commenced a process for submitting further information in relation to the application referred to in subparagraph (1); or

(3) has submitted further information in relation to the application referred to in subparagraph (1),

and, at the commencement date, has not been registered by *NEMMCO* in accordance with clause 2.9.2 as a *Registered Participant*.

(b) A person registered in accordance with this clause 11.10.2:

(1) subject to subparagraph (2), is taken to be registered in accordance with the requirements of the *Rules* as amended by the Amending Rule; and

(2) must submit all information required under clause S5.2.4 within six months of the commencement date.

### **11.10.3 Access standards made under the old Chapter 5**

(a) Any *automatic access standard* or *negotiated access standard* that applied to a *generating unit or generating system* under the old Chapter 5 continues to apply to that system or unit as if the Amending Rule had not been made.

(b) Unless a *Generator* and a *Network Service Provider* otherwise agree, a *negotiated access standard* that is the subject of a negotiating process as at the commencement date, is to be negotiated in accordance with the old Chapter 5, as if the Amending Rule had not been made.

### **11.10.4 Modifications to plant by Generators**

Unless the *Generator* and the relevant *Network Service Provider* otherwise agree, a *Generator* who at the commencement date has proposed to modify a *plant* and has commenced negotiations with a *Network Service Provider* under the old Chapter 5 is to continue the negotiating process in accordance with the old Chapter 5 as if the Amending Rule had not been made.

### **11.10.5 Technical Details to Support Application for Connection and Connection Agreement**

(a) Subject to paragraphs (b) and (c), any decision or action taken by *NEMMCO* for the purpose of developing and *publishing* an initial *Generating System Design Data Sheet*, an initial *Generating System Setting Data Sheet* and initial *Generating System Model Guidelines* under clause S5.5.7 prior to the commencement date has continuing effect as if the decision had been made or the action had been taken under the Amending Rule.

(b) Pending the final *publication* of the *Generating System Design Data Sheet* and the *Generating System Setting Data Sheet* under clause S5.5.7:

- (1) schedule 5.5.1 of the *Rules* as in force immediately before the commencement date is taken to be the interim *Generating System Design Data Sheet*; and
  - (2) schedule 5.5.2 of the *Rules* as in force immediately before the commencement date is taken to be the interim *Generating System Setting Data Sheet*.
- (c) The interim *Generating System Design Data Sheet* and interim *Generating System Setting Data Sheet* referred to in paragraph (b) continue in force until *NEMMCO publishes* the equivalent data sheet under S5.5.7 which must be no later than 29 February 2008.

### **11.10.6 Transitional arrangements for establishment of performance standards**

For the purposes of the definition of performance requirement in clause 4.16.1, clauses S5.2.8 and S5.2.9 of the old Chapter 5 applies as if the Amending Rule had not been made.

### **11.10.7 Jurisdictional Derogations for Queensland**

- (a) For the purposes of clause 9.37.12, clause S5.2.5.2(c) of the old Chapter 5 applies as if the Amending Rule had not been made.
- (b) For the purposes of clause 9.37.21, clause S5.2.5.13 of the old Chapter 5 applies as if the Amending Rule had not been made.

## **11.10A Rules consequent on the making of the National Electricity Amendment (Central Dispatch and Integration of Wind and Other Intermittent Generation) Rule 2008**

### **11.10A.1 Definitions**

In this rule 11.10A:

**Amending Rule** means the National Electricity Amendment (Central Dispatch and Integration of Wind and Other Intermittent Generation) Rule 2008.

**classified generating unit** means a *non-scheduled generating unit* or *scheduled generating unit* immediately before the registration date that could be classified as a *semi-scheduled generating unit* immediately after the registration date.

**commencement date** means the date on which Schedule 2 of the Amending Rule commences operation.

**committed project** means a project that *NEMMCO* considers has been fully committed by the project proponent taking into account the following factors:

- (a) the project proponent's rights to land for the construction of the project;
- (b) whether contracts for the supply and construction of the project's major plant or equipment, including contract provisions for project cancellation payments, have been executed;
- (c) the status of all planning and construction approvals and licences necessary for the commencement of construction of the project, including completed and approved environmental impact statements;
- (d) the level of commitment to financing arrangements for the project; and
- (e) whether project construction has commenced or a firm date has been set for it to commence.

**initial ECM guidelines** has the meaning given in clause 11.10A.8.

**potential semi-scheduled generating unit** means a *generating unit* that, at the time of registration of that unit under Chapter 2, could have been classified as a *semi-scheduled generating unit* in accordance with clause 2.2.7 and:

- (a) is listed in "Table 4.22: Committed NEM Wind Farms" of the 2007 *statement of opportunities*; or
- (b) is considered by *NEMMCO* to be a committed project as at 1 January 2008, and, for the avoidance of doubt, does not include a classified generating unit.

**registered generating unit** means a *generating unit* which has had its classification as a *semi-scheduled generating unit* approved by *NEMMCO* on or after the registration date and before the commencement date.

**registration date** means the date on which Schedule 1 of the Amending Rule commences operation.

### 11.10A.2 Registration and reclassification of classified generating units

- (a) On and after the registration date, a *Non-Scheduled Generator* or *Scheduled Generator* with a classified generating unit will not be required to register as a *Semi-Scheduled Generator* and reclassify the classified generating unit as a *semi-scheduled generating unit*.
- (b) For a period of 2 years after the commencement date, a *Generator* who:
  - (1) as at the commencement date has classified generating units; and
  - (2) subsequently reclassifies those generating units as *semi-scheduled generating units*,

is not required to pay *Participant fees* in accordance with rule 2.11.

- (c) Classified generating units that are reclassified as *semi-scheduled generating units* after the registration date but prior to the commencement date are taken to be *non-scheduled generating units* or *scheduled generating units* (as the case may be) until the commencement date.

### 11.10A.3 Registered generating unit

- (a) Subject to paragraph (b) and clause 11.10A.4, until the commencement date, a registered generating unit is taken to be a *non-scheduled generating unit* for the purposes of the *Rules*.
- (b) A registered generating unit must meet the technical requirements for a *semi-scheduled generating unit* in schedule 5.2.
- (c) A registered generating unit that:
  - (1) prior to the registration date is classified as a *scheduled generating unit*; and
  - (2) on or after the registration date but prior to the commencement date is reclassified as a *semi-scheduled generating unit*,

is taken to continue to be a *scheduled generating unit* until the commencement date.

### 11.10A.4 Classification of potential semi-scheduled generating unit

- (a) On and after the registration date, a person may apply to *NEMMCO* to classify a potential semi-scheduled generating unit as:
  - (1) a *scheduled generating unit* in accordance with clause 2.2.2; or
  - (2) a *non-scheduled generating unit* in accordance with clause 2.2.3.
- (b) *NEMMCO* must treat an application received under paragraph (a) as:
  - (1) in the case of an application referred to paragraph (a)(1), as an application to be classified as a *scheduled generating unit*; or
  - (2) in the case of an application referred to in paragraph (a)(2), as an application to be classified as a *non-scheduled generating unit*.
- (c) In assessing an application referred to in paragraph (a)(2), *NEMMCO* must approve the classification if *NEMMCO* is satisfied that the output of the *generating unit* is *intermittent* even where the *generating unit* does not meet the requirements of clause 2.2.3(b)(1) or (2).
- (d) If an application for classification of a potential semi-scheduled generating unit made under this clause 11.10A.4 is approved by *NEMMCO* in



accordance with clause 2.2.2 or, subject to paragraph (c), clause 2.2.3, the relevant unit is taken to be a *scheduled generating unit* or *non-scheduled generating unit* (as the case may be) for the purposes of the *Rules*.

#### **11.10A.5 Participant fees**

Until *NEMMCO* determines a structure of *Participant fees* under rule 2.11 which provides for *Semi-Scheduled Generators*, references to *Scheduled Generators* in *NEMMCO's* "Structure of Participant Fees under rule 2.11 of the National Electricity Rules" publication dated 24 March 2006, will be taken to include *Semi-Scheduled Generators*.

#### **11.10A.6 Timetable**

- (a) *NEMMCO* must amend the *timetable* in accordance with clause 3.4.3(b) to take into account the Amending Rule with those amendments to take effect from the commencement date.
- (b) All actions taken by *NEMMCO* prior to the commencement date in anticipation of the commencement date to amend the *timetable* as required under paragraph (a) are taken to satisfy the equivalent action required under clause 3.4.3(b).

#### **11.10A.7 Procedure for contribution factors for ancillary service transactions**

- (a) *NEMMCO* must amend the procedure prepared by *NEMMCO* under clause 3.15.6A(k) in accordance with clause 3.15.6A(m) to take into account the Amending Rule with those amendments to take effect from the commencement date.
- (b) All actions taken by *NEMMCO* prior to the commencement date in anticipation of the commencement date to amend the procedure prepared by *NEMMCO* under clause 3.15.6A(k) as required under paragraph (a) are taken to satisfy the equivalent action under clause 3.15.6A(m).

#### **11.10A.8 Guidelines for energy conversion model information**

- (a) Subject to paragraph (b), for the purposes of clause 2.2.7(d) *NEMMCO* must *publish* guidelines by no later than the registration date setting out the information to be contained in *energy conversion models* (the **initial ECM guidelines**).
- (b) The initial ECM guidelines do not need to be prepared in consultation with *Semi-Scheduled Generators*. *NEMMCO* must replace the initial ECM guidelines as soon as reasonably practicable with guidelines described in clause 2.2.7(d) which have been prepared in consultation with *Semi-*

*Scheduled Generators* and such other person that *NEMMCO*, acting reasonably, considers appropriate.

## **11.11 Rules consequent on making of the National Electricity Amendment (Cost Recovery of Localised Regulation Services) Rule 2007**

### **11.11.1 Definitions**

For the purposes of this rule 11.11:

**Amending Rule** means the National Electricity Amendment (Cost Recovery of Localised Regulation Services) Rule 2007.

**commencement date** means 1 January 2009.

### **11.11.2 Action taken by NEMMCO for the purposes of Amending Rule**

- (a) Any action taken by *NEMMCO* prior to the commencement date for the purpose of amending the procedure prepared by *NEMMCO* under clause 3.15.6A(k) for the purpose of the Amending Rule is taken to have satisfied the equivalent action under the *Rules*.
- (b) Any action taken by *NEMMCO* prior to the commencement date to calculate the *local market ancillary service requirement* to include *regulation services* for the purposes of the Amending Rule is taken to have satisfied the equivalent action under the *Rules*.

## **11.12 Rules consequent on making of the National Electricity Amendment (Efficient Dispatch of Regulation Services) Rule 2007**

### **11.12.1 Definitions**

For the purposes of this rule 11.12:

**Amending Rule** means the National Electricity Amendment (Efficient Dispatch of Regulation Services) Rule 2007.

**commencement date** means 1 January 2009.

### **11.12.2 Action taken by NEMMCO for the purposes of Amending Rule**

- (a) Any action taken by *NEMMCO* prior to the commencement date for the purpose of revising the *market ancillary service specification* as a result of the Amending Rule is taken to satisfy the equivalent actions required for revising a *market ancillary service specification* under the *Rules*.

- (b) Any action taken by *NEMMCO* prior to the commencement date for the purpose of revising the procedures established under clause 3.8.1(c) to allow relaxation of *power system constraints* as a result of the Amending Rule, is taken to satisfy any equivalent actions required under the *Rules*.
- (c) Any action taken by *NEMMCO* prior to the commencement date for the purpose of amending the methodology developed by *NEMMCO* to determine *dispatch prices* and *ancillary service prices* under clause 3.9.3(b) as a result of the Amending Rule is taken to satisfy the equivalent actions required under the *Rules*.

## Part L Abolition of Snowy Region (2007 amendments)

### 11.13 Rules consequent on making the National Electricity Amendment (Abolition of Snowy Region) Rule 2007

#### 11.13.1 Definitions

In this rule 11.13:

**Amending Rule 2007** means the National Electricity Amendment (Abolition of Snowy Region) Rule 2007.

**current Regions Publication** means the document published by *NEMMCO* entitled “List of Regional Boundaries and Marginal Loss Factors for the 2007/08 Financial Year”.

**Draft Determination date** means 25 January 2007.

**implementation period** means the period specified in clause 11.13.4.

**implementation plan** means the plan referred to in clause 11.13.5.

**implementation function** means a function referred to in clause 11.13.6.

**Loss Factors Publication** means the document *published* by *NEMMCO* from time to time under clauses 3.6.1(f) and 3.6.2(f1) which sets out *marginal loss factors*.

**modified regions** means the *regions* identified as the New South Wales *region* and the Victoria *region* in the current *Regions Publication*, modified as a result of the abolition of the Snowy *region* under the *Amending Rule 2007* taking effect.

**new regions** means the unmodified *regions* and the modified *regions*.

**New South Wales region, Snowy region and Victoria region** each have the same meaning as in clause 3.5.6.

**old regions** means the *regions* identified in the current *Regions Publication*.

**Rule commencement date** means the date on which the *Amending Rule 2007* commences operation.

**unmodified regions** means the *regions* known as the Queensland *region*, the South Australia *region* and the Tasmania *region* as identified in the current *Regions Publication*, the boundaries of which are not affected by the abolition of the Snowy *region* under the *Amending Rule 2007*.

### 11.13.2 Purpose of rule 11.13

The purpose of this rule 11.13 is to enable the efficient and effective implementation of a change of *region* boundaries as a result of the abolition of the Snowy *region* during the implementation period, prior to the start of the new *regions*, and to support a smooth transition from the old *regions* to the new *regions*.

### 11.13.3 Application of rule 11.13

This rule 11.13 applies despite any other provision of the *Rules* (including any guideline or procedure made under the *Rules*), and to the extent of any inconsistency, this rule 11.13 prevails during the implementation period.

### 11.13.4 Implementation period

- (a) The implementation period starts on the Rule commencement date and ends on 15 July 2008.
- (b) Any decision made or action taken by *NEMMCO* for the purpose of implementing the abolition of the Snowy *region* between the Draft Determination date and the Rule commencement date, has continuing effect as if the decision had been made or the action had been taken under the *Rules* as amended by the *Amending Rule 2007*.

### 11.13.5 Publishing of implementation plan by NEMMCO

- (a) *NEMMCO* must develop and *publish* by 15 September 2007 an implementation plan that identifies the key implementation steps to be taken during the implementation period, including the proposed exercise by *NEMMCO* of the implementation functions.
- (b) *NEMMCO* may, during the implementation period, amend the implementation plan as necessary, and must *publish* the amended plan.

### 11.13.6 NEMMCO implementation functions

- (a) Subject to this rule 11.13, *NEMMCO* has, during the implementation period, the following functions and powers ('the implementation functions'):
- (1) the power to make a decision or take any action (including the power to refrain from making a decision or taking action) that is necessary or consequential to the implementation of the *Amending Rule 2007*; and
  - (2) the other functions and powers specified under this rule 11.13.
- (b) The exercise of the implementation functions by *NEMMCO* must be referable to and consistent with the implementation plan as *published*.

### 11.13.7 Software modifications to implement abolition of Snowy region

Despite clause 3.17.1 and subject to this clause 11.13.7, *NEMMCO*:

- (1) may, as an implementation function, alter, reconfigure, reprogram or otherwise modify or enhance any computer software required for the operation of the *market*; and
- (2) must, to the extent practicable, adhere to the procedures for change management under the document entitled "NEM Systems IT Procedure Manual: Change Management" and *NEMMCO* may make the changes under paragraph (1) without authorisation by the *AER* even if *NEMMCO* does not fully adhere to that document.

### 11.13.8 Allocation of transmission connection points as a result of abolition of Snowy region

Each *transmission network connection point* previously assigned to the Snowy region as at the Rule commencement date is allocated to the New South Wales region and the Victoria region as follows:

#### Loads

Location	Voltage kV	TNI code	Region
Khancoban	330	NKHN	Victoria

#### Generation

Location	Voltage kV	Connection point ID	TNI code	Region
Jindabyne pump at Guthega	132	NGJP	NGJP	Victoria

Location	Voltage kV	Connection point ID	TNI code	Region
Guthega	132	NGUT	NGUT	NSW
Guthega Ancillary Services 2	132	NGUT2	NGUT	NSW
Guthega	132	NGUT8	NGUT	NSW
Lower Tumut	330	NLTS	NLTS	NSW
Lower Tumut Ancillary Services 2 (pumps)	330	NLTS3	NLTS	NSW
Lower Tumut Ancillary Services 3	330	NLTS5	NLTS	NSW
Lower Tumut	330	NLTS8	NLTS	NSW
Murray Ancillary Services 1	330	NMUR11	NMUR	Victoria
Murray Ancillary Services 2	330	NMUR13	NMUR	Victoria
Murray Ancillary Services 3	330	NMUR5	NMUR	Victoria
Murray Ancillary Services 4	330	NMUR7	NMUR	Victoria
Murray	330	NMUR8	NMUR	Victoria
Murray Ancillary Services 5	330	NMUR9	NMUR	Victoria
Upper Tumut	330	NUTS	NUTS	NSW
Upper Tumut Ancillary Services 2	330	NUTS3	NUTS	NSW
Upper Tumut Ancillary Services 3	330	NUTS5	NUTS	NSW
Upper Tumut Ancillary Services 4	330	NUTS7	NUTS	NSW
Upper Tumut	330	NUTS8	NUTS	NSW

### 11.13.9 Location of region boundaries

The location of the *region* boundary between the New South Wales *region* and the Victoria *region* as a result of the abolition of the Snowy *region* is as follows:

- (1) at Red Cliffs Terminal Station on the 0X1 Red Cliffs to Buronga 220 Transmission Line;

- (2) at Wodonga Terminal Station on the 060 Wodonga to Jindera 330 Transmission Line;
- (3) at Murray Switching Station on the 066 Murray to Lower Tumut 330 Transmission Line;
- (4) at Murray Switching Station on the 065 Murray to Upper Tumut 330 Transmission Line;
- (5) at the Guthega 132kV Switchyard 132kV Bus No 2-3 bus Section Disconnecter 4128.

#### **11.13.10 2008/09 Regions Publication and Loss Factors Publication**

- (a) *NEMMCO* must, as an implementation function, review and *publish* by 1 April 2008:
  - (1) the 2008/09 *Regions Publication*; and
  - (2) the 2008/09 Loss Factors Publication,making any changes necessary in accordance with the *Amending Rule 2007*, including but not limited to the allocation of *transmission network connection points* under clause 11.13.8 and the location of *region* boundaries under clause 11.13.9.
- (b) In relation to the publications referred to in paragraph (a) (or subsequent annual *Regions Publications* or Loss Factors Publications), nothing prevents *NEMMCO*:
  - (1) amending those publications to implement:
    - (i) the *Amending Rule 2007* or future *region* boundary changes under the *Rules*;
    - (ii) future physical changes to the *transmission network*; or
    - (iii) changes in the configuration of *connection points* requested by *Registered Participants* for the purposes of participation in the *NEM*; or
  - (2) publishing the annual *Regions Publication* and the Loss Factors Publication in a single document.

#### **11.13.11 Reserve margin calculations**

*NEMMCO* may, as an implementation function, determine estimates of the minimum reserve levels to be applied to the modified *regions* provided that the process used to determine the estimates is *published*.

### 11.13.12 Re-calculation of network constraints and transmission loss factors

- (a) A *Transmission Network Service Provider* must, to the extent practicable, provide to *NEMMCO* on request information for or with respect to the re-calculation of *network constraints* and *transmission loss factors* including but not limited to:
  - (1) advice on the re-calculation of *network* limits, including stability limits; and
  - (2) information relating to the determination of *network losses* and *loss factors*.
- (b) Where a *Transmission Network Service Provider* advises *NEMMCO* that it is not practicable to provide information relating to the re-calculation of *network* limits or losses within the time period specified in the request, *NEMMCO* may:
  - (1) request the *Transmission Network Service Provider* to provide the information to *NEMMCO* as it becomes available to the provider;
  - (2) determine *inter-regional loss factors* on the basis of estimates;
  - (3) apportion losses for the purpose of *settlements residue payments* using estimates; or
  - (4) re-formulate existing *network constraints* to apply to the new *regions* using estimates.
- (c) *NEMMCO* must *publish* the process used for determining estimates under paragraph (b).

### 11.13.13 Transition of settlements residue auction arrangements

- (a) Terms used in this clause 11.13.13 that are used in the *auction rules* have the same meaning as in those rules.
- (b) Despite anything in rule 3.18, *NEMMCO*:
  - (1) may, as an implementation function:
    - (i) amend the *auction rules*;
    - (ii) remove or modify Unit Categories affected by the abolition of the *Snowy region* and the consequential modification of the *New South Wales region* and the *Victoria region*;



- (iii) re-set *auction expense fees* as required to align with any new Unit Categories;
  - (iv) conduct *auctions* in relation to new Unit Categories; and
  - (v) take any other action in relation to *auctions* that is necessary or consequential on the abolition of the Snowy *region*; and
- (2) must consult with the *Settlements Residue Committee* in amending the *auction rules* under paragraph (1) and is only required to comply with the *Rules consultation procedures* to the extent practicable in the circumstances of the implementation of the abolition of the Snowy *region*.

#### 11.13.14 Continuity of regions

Subject to this rule 11.13 and clause 3.5.6, on and from 00:00 hours *EST* on 1 July 2008:

- (1) the unmodified *regions* continue and are taken to be *regions* for all purposes under the *Rules*; and
- (2) the New South Wales *region* and the Victoria *region* as modified by the *Amending Rule 2007* continue and are taken to be *regions* specified under clause 3.5.1 for all purposes under the *Rules*.

## Part M Economic Regulation of Distribution Services (2007 amendments)

### Division 1 General Provisions

#### 11.14 General provisions

##### 11.14.1 Application of this Division

This Division has no application in relation to Victoria.

##### 11.14.2 Definitions

**amending rules** means the *National Electricity (Economic Regulation of Distribution Services) Amendment Rules 2007*.

**current Chapter 6** means Chapter 6 of these *Rules* as currently in force.

**former Chapter 6** means Chapter 6 of these *Rules* as in force before the substitution of the *current Chapter 6* by the amending rules.

**jurisdictional pricing determination** for a *participating jurisdiction* means a determination regulating *distribution service* pricing made by the *Jurisdictional Regulator* for the *participating jurisdiction* and in force immediately before the date of the relevant amendment.

**new regulatory provisions** means the provisions of *current Chapter 6* or (if applicable) of later Divisions of this Part providing for the economic regulation of *distribution services* after the transitional regulatory period comes to an end.

**old regulatory regime** for a *participating jurisdiction* includes:

- (a) the jurisdictional pricing determination for the *participating jurisdiction*; and
- (b) the laws (including the *former Chapter 6*) governing the making, monitoring, administration and enforcement of the jurisdictional pricing determination;
- (c) any other determination, guideline, code or document (whatever its description) of a kind contemplated by the *former Chapter 6* that was made for the *participating jurisdiction* by the relevant *Jurisdictional Regulator* and was in force immediately before the date of the relevant amendment;
- (d) any other obligation imposed by or under the *former Chapter 6*;
- (e) any power or function of the *Jurisdictional Regulator* under the *former Chapter 6*.

**new regulatory regime** means the system for the economic regulation of *distribution services* contemplated by the new regulatory provisions.

**relevant amendment** means the substitution of the current Chapter 6 for the *former Chapter 6* by the amending rules.

**transitional regulatory period** for a *participating jurisdiction* means the *regulatory control period* for which the *jurisdictional pricing determination* for the relevant *participating jurisdiction* was made.

### 11.14.3 Preservation of old regulatory regime

- (a) Subject to this Part, a *Distribution Network Service Provider* who was providing *distribution services* in a *participating jurisdiction* at the date of the relevant amendment
  - (1) remains subject to the old regulatory regime for the duration of the transitional regulatory period; and

- (2) does not become subject to the new regulatory regime until the end of the transitional regulatory period.

*Examples:*

1. *Reporting, monitoring and other compliance requirements continue under the old regulatory regime until the end of the transitional regulatory period and (subject to this Part) are unaffected by the new regulatory provisions.*
2. *Price regulation continues under the old regulatory regime until the end of the transitional regulatory period and is unaffected by the new regulatory provisions.*
3. *Prudential, billing and settlement issues are governed by rules 6.7 and 6.8 of former Chapter 6 and any applicable regulatory instruments (rather than Parts J and K of current Chapter 6).*
4. *Access disputes are dealt with under the old regulatory regime (and cannot be notified under Part L of current Chapter 6).*

(b) However:

- (1) the new regulatory provisions govern the making of a distribution determination for the *Distribution Network Service Provider* at the end of the transitional regulatory period; and
- (2) in that respect the *new regulatory provisions* apply to a *Distribution Network Service Provider* who is still subject to the old regulatory regime as if the jurisdictional pricing determination were a distribution determination approaching the end of its *regulatory control period*.

#### **11.14.4 Transfer of regulatory responsibility**

- (a) The Minister for a *participating jurisdiction* may, during the course of the transitional regulatory period, transfer responsibility for the economic regulation of *distribution services* in the relevant jurisdiction from the *Jurisdictional Regulator* to the *AER*.
- (b) A Minister for a *participating jurisdiction* makes (or is taken to make) a transfer of regulatory responsibility under this clause:
  - (1) by giving notice of the transfer to the *Jurisdictional Regulator* and the *AER*; or
  - (2) if powers exist apart from this clause under the law of the *participating jurisdiction* to transfer regulatory responsibility from the *Jurisdictional Regulator* to the *AER* – by exercising those powers.

- (c) If the Minister makes a transfer of regulatory responsibility under this clause:
- (1) the *AER* is subrogated to the position of the *Jurisdictional Regulator*; and
  - (2) the *AER* may therefore exercise powers and functions of the *Jurisdictional Regulator* (including legislative powers and functions) under the old regulatory regime; and

*Note:*

*The AER may also use its powers (e.g. for information gathering) under the Law.*

- (3) references to the *Jurisdictional Regulator* in a determination or other instrument (including a legislative instrument) related to the old regulatory regime will be read as references to the *AER*.

#### **11.14.5 Special requirements with regard to ring fencing**

- (a) The requirements of the old regulatory regime with regard to ring fencing (rule 6.12 of *former Chapter 6* and related guidelines) apply to a *Distribution Network Service Provider* until the *AER* assumes regulatory responsibility at the end of the transitional regulatory period or on the earlier transfer of regulatory responsibility to the *AER*.
- (b) On the *AER's* assumption of regulatory responsibility, a *Distribution Network Service Provider*:
  - (1) ceases to be subject to the requirements of the old regulatory regime with regard to ring fencing; and
  - (2) becomes subject to the ring fencing requirements of the new regulatory regime; but
  - (3) guidelines in force for a *participating jurisdiction* immediately before the *AER's* assumption of regulatory responsibility (**transitional guidelines**) continue in force for that jurisdiction subject to amendment, revocation or replacement by guidelines made under the new regulatory regime.
- (c) The transitional guidelines:
  - (1) are taken to be guidelines made by the *AER* under the new regulatory regime; and
  - (2) are to be construed as if references to a *Jurisdictional Regulator* were references to the *AER*.

- (d) A waiver granted, or additional ring fencing requirement imposed, by a *Jurisdictional Regulator* under the transitional guidelines continues in force under the transitional guidelines subject to variation or revocation by the *AER*.

#### **11.14.6 Additional requirements with regard to cost allocation**

- (a) Even though a *Distribution Network Service Provider* remains subject to the old regulatory regime, the provider is also subject, as from the date of the relevant amendment, to the requirements of Part F of the current Chapter 6 (Cost Allocation).
- (b) This clause applies only for the purposes of the next distribution determination for the *Distribution Network Service Provider*.

#### **11.14.7 Construction of documents**

To facilitate the transition from the old regulatory regime to the new regulatory regime, references in determinations and other documents to provisions of former Chapter 6 are to be read (where the context admits) to corresponding provisions of the current Chapter 6.

### **Division 2 Special provisions applying to New South Wales and the Australian Capital Territory for the Regulatory Control Period 2009-2014**

#### **11.15 Special provisions applying to New South Wales and the Australian Capital Territory**

##### **11.15.1 Regulatory control period 2009-2014 for NSW and ACT**

There is to be a regulatory control period of 5 years for the NSW and ACT Distribution Network Service Providers commencing on 1 July 2009, which is referred to in this Division 2 as the regulatory control period 2009-2014.

##### **11.15.2 Application of Chapter 6 to NSW and ACT for regulatory control period 2009-2014**

- (a) Chapter 6 of the *Rules* applies in relation to the NSW and ACT Distribution Network Service Providers in respect of the regulatory control period 2009-2014 as if that Chapter were amended so as to be in the form set out in Appendix 1 to the *Rules*.
- (b) However, anything required to be done by or in relation to the NSW and ACT Distribution Network Service Providers during the regulatory control period 2009-2014 for the purposes of the *regulatory control period* commencing on 1 July 2014 is to be done in accordance with general

Chapter 6, but (where appropriate) taking into account anything done under transitional Chapter 6.

- (c) Accordingly general Chapter 6 does not apply in relation to the NSW and ACT Distribution Network Service Providers in respect of the regulatory control period 2009-2014 except:
  - (1) as provided by paragraphs (a) and (b); and
  - (2) to the extent that a provision of transitional Chapter 6 expressly applies a provision of general Chapter 6 or expressly provides that an act, matter or thing has to be done in accordance with a provision of or a procedure in general Chapter 6.
- (d) For the avoidance of doubt, this rule 11.15 and transitional Chapter 6 do not apply to *Distribution Network Service Providers* not referred to in paragraph (c).
- (e) References in the *Rules* (other than Chapter 6 and this rule 11.15) to Chapter 6 or a provision of Chapter 6 are references to transitional Chapter 6 or a provision of transitional Chapter 6 so far as the references relate to the regulatory control period 2009-2014 for the NSW and ACT Distribution Network Service Providers.
- (f) In this rule 11.15:
  - “general Chapter 6” means Chapter 6 as in force apart from this rule 11.15.
  - “transitional Chapter 6” means Chapter 6 in the form set out in Appendix 1 to the Rules.

### **Division 3 Transitional arrangements for first distribution determination for Queensland Distribution Network Service Providers**

#### **11.16 Transitional arrangements for first distribution determination for Queensland Distribution Network Service Providers**

##### **11.16.1 Definitions**

In this Division 3:

**2005 determination** means the Final Determination: Regulation of Electricity Distribution of the Queensland Competition Authority dated April 2005.

**EDSD Review** means the review by the Independent Panel appointed by the Queensland Government into Electricity Distribution and Service Delivery for the 21st Century which was established in March 2004 and reported in July 2004.

**ENERGEX** means Energex Limited A.C.N 078 849 055 and any successor business.

**Ergon Energy** means Ergon Energy Corporation Limited A.C.N. 087 646 062 and any successor business.

**Queensland Competition Authority** means the authority established by section 7 of the *Queensland Competition Authority Act 1997* (Qld).

**regulatory control period** means the *regulatory control period* beginning 1 July 2010.

### **11.16.2 Application of Part to Queensland 2010 distribution determinations**

The requirements of this Division 3 apply for the purposes of making a distribution determination for ENERGEX and Ergon Energy for the regulatory control period and modify the application of Chapter 6 of the Rules to the extent set out in this Division 3.

### **11.16.3 Treatment of the regulatory asset base**

- (a) Nothing in Chapter 6 of the *Rules* requires ENERGEX or Ergon Energy to amend the approach allowed in the 2005 determination in relation to the treatment of *standard control services* and other services in the regulatory asset base for the regulatory control period.
- (b) The *AER* must accept the approach proposed by ENERGEX and Ergon Energy for the regulatory control period if it is consistent with the approach in the 2005 determination.
- (c) The *AER* must provide for any necessary adjustments or mechanisms in the *distribution determination* for the regulatory control period to prevent any cross-subsidies between *standard control services* and other *distribution services*.

*Note:*

*The regulatory asset bases for Ergon Energy and ENERGEX are likely to include assets used to provide services which are not standard control services and accordingly the expected revenue for each year will need to be adjusted to avoid double recovery of those costs.*

### **11.16.4 Efficiency Benefit Sharing Scheme**

- (a) An *efficiency benefit sharing scheme* for ENERGEX and Ergon Energy for the regulatory control period must not cover efficiency gains and losses relating to capital expenditure.

- (b) For the purposes of clause 6.5.8(c) the *AER* must also have regard to the continuing obligations on ENERGEX and Ergon Energy throughout the regulatory control period to implement the recommendations from the EDSD Review adopted by the Queensland Government.

### 11.16.5 Service Target Performance Incentive Scheme

In formulating a *service target performance incentive scheme* to apply to ENERGEX and Ergon Energy for the regulatory control period, the *AER*, in addition to the requirements in clause 6.6.2(b), must also:

- (1) take into account the continuing obligations on ENERGEX and Ergon Energy throughout the regulatory control period to implement the recommendations from the EDSD Review adopted by the Queensland Government;
- (2) take into account the impact of severe weather events on service performance; and
- (3) consider whether the scheme should be applied by way of a paper trial or whether a lower powered incentive is appropriate.

### 11.16.6 Framework and approach

- (a) If either ENERGEX or Ergon Energy submits a proposal to the *AER* as to the classification of services and control mechanism for the regulatory control period on or before 31 March 2008, the *AER* must publish its *framework and approach paper* under clause 6.8.1 in relation to those issues within five months of receiving the proposal from ENERGEX or Ergon Energy (as the case may be).
- (b) This clause does not affect the timing or the processes of the *AER* in preparing and publishing its *framework and approach paper* on the remaining issues in clause 6.8.1 for ENERGEX or Ergon Energy if they submit a proposal under paragraph (a).

### 11.16.7 Regulatory Proposal

- (a) For the purposes of submitting a *regulatory proposal* under clause 6.8.2 for the regulatory control period, ENERGEX and Ergon Energy may, for the purposes of calculating indicative prices referred to in clause 6.8.2(c)(4) and including X factors for the purposes of clause 6.5.9, treat the proposed *statement of regulatory intent* published under clause 6.16(b)(1) as if it were the applicable *statement of regulatory intent*.
- (b) If the *statement of regulatory intent* differs materially from the proposed *statement of regulatory intent*, ENERGEX or Ergon Energy may revise its



calculation of indicative prices and proposed X factors in its *regulatory proposal* on or before 1 July 2009.

- (c) The *AER* must *publish* any revised information submitted by ENERGEX or Ergon Energy under this clause.

### **11.16.8 Side constraints**

For the regulatory control period, nothing in clause 6.18.6 should preclude the implementation of any price paths approved by the Queensland Competition Authority (including any necessary adjustment of those price paths in light of the expected revenue for the first *regulatory year* of the regulatory control period).

### **11.16.9 Cost pass throughs**

- (a) If an event or circumstance occurs before 1 July 2010 which would constitute a pass through under the 2005 determination and no application for a pass through has been made in relation to that event or circumstance, ENERGEX or Ergon Energy may apply to the *AER* within a year of the event or circumstance occurring to accommodate the impact of the event in the regulatory control period.
- (b) The *AER* must allow a pass through of such amounts if the event or circumstance would have constituted a pass through under the 2005 determination as if the amounts were *approved pass through amounts* under clause 6.6.1.

### **11.16.10 Capital Contributions Policy**

- (a) ENERGEX and Ergon Energy must comply with a capital contributions policy published under this clause 11.16.10 for the regulatory control period.
- (b) By 1 July 2009, ENERGEX and Ergon Energy must publish on their website a capital contributions policy based upon the requirements relating to capital contributions in their Network Pricing Principles Statements approved by the Queensland Competition Authority immediately in force prior to 1 July 2009.
- (c) The *AER* may by written notice, before 1 January 2010, direct ENERGEX or Ergon Energy to revise and republish their capital contributions policy within 15 *business days* of the notice only if the published policy does not give effect to the requirements relating to capital contributions in their Network Pricing Principles Statement.
- (d) After 1 January 2010, ENERGEX or Ergon Energy may apply to the *AER* to amend their published capital contributions policy and the *AER* may, after

such consultation as it considers appropriate, approve or not approve that amendment.

## **Division 4 – Transitional provisions of specific application to Victoria**

### **11.17 Transitional provisions of specific application to Victoria**

#### **11.17.1 Definitions**

In this Division:

**AMI Order in Council** means the Order in Council made by the Governor of Victoria under section 15A and section 46D of the *Electricity Industry Act 2000* (Vic) and published in the Victoria Government Gazette on 28 August 2007 (and includes that Order in Council as amended from time to time).

**ESC cost allocation guidelines** means *Electricity Industry Guideline No.3, Regulatory Information Requirements* made by the ESC and dated 14 December 2006 (and includes those guidelines as amended from time to time).

**ESC distribution pricing determination** means the Victorian distribution pricing determination as defined in section 3(1) of the *National Electricity (Victoria) Act 2005*.

**Victorian Distribution Network Service Provider** means a *Distribution Network Service Provider* for a *distribution network* situated wholly or partly in Victoria.

#### **11.17.2 Calculation of estimated cost of corporate income tax**

- (a) This clause applies to the calculation of the estimated cost of corporate income tax for the purposes of distribution determinations that are to take effect on 1 January 2011 for Victorian Distribution Network Service Providers.
- (b) For calculating the estimated cost of corporate income tax, the *AER* must adopt:
  - (1) the taxation values of assets carried over from the ESC distribution pricing determination; and
  - (2) the classification of assets, and the method of classification, adopted for the ESC distribution pricing determination; and
  - (3) the same method of depreciation as was adopted by the ESC for the ESC distribution pricing determination.

- (c) The *AER* may, however, depart from methods of asset classification or depreciation mentioned in paragraph (b)(2) or (3) to the extent required by changes in the taxation laws or rulings given by the Australian Taxation office.
- (d) A *post-tax revenue model* must be consistent with this clause.

### **11.17.3 Decisions made in the absence of a statement of regulatory intent**

- (a) This clause applies if a Victorian Distribution Network Service Provider submits a *building block proposal* before the *AER* issues a *statement of regulatory intent*.
- (b) In deciding questions to which the considerations stated in clause 6.5.4(e) are relevant, the *AER* must have regard to those considerations.

### **11.17.4 Cost allocation guidelines**

- (a) In formulating the *Cost Allocation Guidelines* under clause 6.15.3, the *AER* must include guidelines specifically applicable to Victorian Distribution Network Service Providers (the *guidelines of specific application to Victoria*).
- (b) The guidelines of specific application to Victoria:
  - (1) must be formulated with regard to the ESC cost allocation guidelines; and
  - (2) must be designed to ensure, to the maximum practicable extent, consistency between cost allocation as required by the ESC distribution pricing determination and cost allocation in later *regulatory control periods*.

### **11.17.5 Modification of requirements related to cost allocation method**

- (a) Clause 6.15.4(a) applies to a Victorian Distribution Network Service Provider as if, instead of requiring submission of the provider's proposed *Cost Allocation Method* within 12 months after the commencement of Chapter 6, it required submission of the proposed *Cost Allocation Method* together with the first *building block proposal* to be submitted by the provider after the commencement of Chapter 6.
- (b) The references in clauses 6.5.6(b)(2) and 6.5.7(b)(2) to the *Cost Allocation Method* are, if paragraph (a) is applicable, to be read as references to the proposed *Cost Allocation Method* submitted with the *building block proposal*.

- (c) The *AER* must include in its *framework and approach paper* prepared for a Victorian *Distribution Network Service Provider*, in relation to the first *building block proposal* to be submitted by the provider after the commencement of Chapter 6, a statement of its likely approach to cost allocation based on the guidelines then in force.
- (d) The *AER*:
  - (1) must, in deciding under clause 6.15.4(c) whether to approve a *Cost Allocation Method* submitted by a Victorian Distribution Network Service Provider, have regard to previous cost allocation in accordance with the ESC distribution pricing determination; and
  - (2) must not approve the *Cost Allocation Method* unless it allows effective comparison of historical and forecast cost allocation between the period to which the ESC distribution pricing determination applies and later *regulatory control periods*; and
  - (3) may, subject to the relevant *Cost Allocation Guidelines*, refuse to approve the *Cost Allocation Method* if it differs from the method previously used by the Victorian Distribution Network Service Provider.

#### 11.17.6 AMI Order in Council

- (a) Metering services that are regulated under the AMI Order in Council are not, while so regulated, subject to regulation under a distribution determination but, on cessation of regulation under the AMI Order in Council, are liable to regulation under a distribution determination.
- (b) However, for a relevant *regulatory control period*, services to which exit fees under clause 7, or restoration fees under clause 8, of the AMI Order in Council applied are to be classified as alternative control services and are to be regulated by the *AER* on the same basis as applied under the AMI Order in Council.
- (c) For paragraph (b), a relevant *regulatory control period* is a *regulatory control period* commencing on or after 1 January 2016 and before 1 January 2021.
- (d) Until there is a transfer of regulatory responsibility from the *ESC* to the *AER* under a law of Victoria, clause 7.3.6(f) in its application to Victoria will be read as if it permitted the recovery of the costs to which it refers in accordance with a determination made either by the *AER* or by the *ESC*.
- (e) This clause expires on 1 January 2021.

## Part N Registration of Foreign Based Persons and Corporations as Trader Class Participants (2007 amendments)

### 11.18 Rules consequential on the making of the National Electricity Amendment (Registration of Foreign Based Persons and Corporations as Trader Class Participants) Rule 2007

#### 11.18.1 Definitions

For the purposes of this rule 11.18:

**Amending Rule** means the National Electricity Amendment (Registration of Foreign Based Persons and Corporations as Trader Class Participants) Rule 2007.

**commencement date** means the day on which the Amending Rule commences operation.

#### 11.18.2 Auction rules

- (a) *NEMMCO* must amend the *auction rules* by 1 September 2008 in accordance with clause 3.18.3 to incorporate the amendments to the *Rules* made by the Amending Rule.
- (b) Any action taken by *NEMMCO* prior to the commencement date, in anticipation of the commencement date, to amend the *auction rules* for the purpose of the Amending Rule is taken to satisfy the equivalent action under clause 3.18.3.

## Part O Process for Region Change (2007 amendments)

### 11.19 Rules consequent on making of the National Electricity Amendment (Process for Region Change) Rule 2007

#### 11.19.1 Definitions

**Amending Rule** means the National Electricity Amendment (Process for Region Change) Rule 2007.

**commencement date** means the day on which the Amending Rule commences operation.

**old clause 3.5.5** means clause 3.5.5 of the *Rules* as in force immediately before the commencement date.

## 11.19.2 Regions Publication

The Regions Publication published by *NEMMCO* immediately before the commencement date in accordance with old clause 3.5.5 and clause 11.13.10 is taken to be the *Regions Publication* published by *NEMMCO* in accordance with clause 2A.1.3.

## Part P Integration of NEM Metrology Requirements

### 11.20 Rules consequential on the making of the National Electricity Amendment (Integration of NEM Metrology Requirements) Rule 2008

#### 11.20.1 Definitions

For the purposes of this rule 11.20:

**Amending Rule** means the National Electricity Amendment (Integration of NEM Metrology Requirements) Rule 2008.

**commencement date** means the day on which the Amending Rule commences operation.

**first-tier jurisdictional requirements publication** means the publication published by *NEMMCO* in accordance with clause 11.20.6.

**Minimalist Transitioning Approach** has the same meaning as in the Queensland Electricity Industry Code.

**new clause 7.3.1** means clause 7.3.1 of the *Rules* immediately after the commencement date.

**Victorian first-tier load** means a load in Victoria where the electricity flowing through the *connection point* is equal to, or greater than, 160 MWh per annum.

#### 11.20.2 Metering installations for non-market generating units immediately prior to 30 June 2008

- (a) A *metering installation* for a *non-market generating unit* that was installed immediately prior to 30 June 2008 and complied with the applicable jurisdictional requirements for that installation on 30 June 2008 is taken to satisfy the requirements for *metering installations* for *non-market generating units* in new clause 7.3.1.
- (b) Where a *metering installation* for a *non-market generating unit* did not comply with the requirements referred to in paragraph (a), that installation

must be repaired or replaced in accordance with the requirements of new clause 7.3.1.

- (c) The applicable jurisdictional requirements for *metering installations* for *non-market generating units* referred to in paragraph (a) must be referred to in the first-tier jurisdictional requirements publication.

### 11.20.3 First-tier load metering installations

- (a) Subject to clause 11.20.5, a *first-tier load metering installation* as at 30 June 2008 that complied with the applicable jurisdictional requirements for that installation as at that date is taken to comply with the *Rules* provided the *metering installation* continues to comply with the applicable jurisdictional requirements as at 30 June 2008.
- (b) A *first-tier load metering installation* that does not satisfy the requirements of paragraph (a) must be repaired or replaced in accordance with the *Rules*.
- (c) The applicable jurisdictional requirements referred to in paragraph (a) for *first-tier load metering installations* must be referred to in the first-tier jurisdictional requirements publication.

### 11.20.4 First-tier load metering installations in Victoria

- (a) Subject to paragraph (b) and despite the *Rules*, a *Market Participant* who is responsible for a Victorian *first-tier load* with a type 5 or type 6 *metering installation* immediately before the commencement date is taken to be the *responsible person* for that *metering installation*.
- (b) A *Market Participant* who is taken to be the *responsible person* for the *metering installation* referred to in paragraph (a) must ensure the *metering installation* meets the applicable jurisdictional requirements for that installation as referred to in the first-tier jurisdictional requirements publication in accordance with clause 11.20.3(c).

### 11.20.5 Minimalist Transitioning Approach in Queensland

For the duration of the Minimalist Transitioning Approach, clauses 7.2.3(i)(2), 7.2.5(b)(2), 7.2.5(d)(6) and 7.3.1(f) of the *Rules* do not apply in respect of a *metering installation* which:

- (a) is the responsibility of a *Market Participant* or *responsible person* who is operating under the Minimalist Transitioning Approach in Queensland; and
- (b) in accordance with the *Market Settlement and Transfer Solution Procedures*:
  - (1) has a *NMI* classification of SMALL; and

- (2) the *Local Network Service Provider* has not received a valid request from a *Market Customer* for the *NMI* to be registered with *NEMMCO*.

### 11.20.6 First-tier jurisdictional requirements publication

- (a) *NEMMCO* must, in consultation with the *participating jurisdictions*, publish a document (**‘first-tier jurisdictional requirements publication’**) that lists the documents that contain the applicable jurisdictional requirements referred to in clauses 11.20.2, 11.20.3 and 11.20.4.
- (b) *NEMMCO* must *publish* the first-tier jurisdictional requirements publication by 30 June 2008.

### 11.20.7 Metrology procedure

- (a) *NEMMCO* must make the required amendments to the *metrology procedure* as a result of the Amending Rule by 31 July 2008.
- (b) All actions taken by *NEMMCO* prior to the commencement date to amend the *metrology procedure* in accordance with paragraph (a) are deemed to be valid as at the commencement date to the extent that those actions were taken in accordance with the relevant requirements of rule 7.14 (as though the Amending Rule was in force at the time that the action was taken).
- (c) The *metrology procedure* published in accordance with rule 7.14 immediately before the commencement date continues to apply as if the Amending Rule had not been made and until *NEMMCO publishes* the amended the *metrology procedure* in accordance with paragraph (a).

## 11.21 Rules consequential on the making of the National Electricity Amendment (NEM Reliability Settings: Information Safety Net and Directions) Rule 2008 No. 6

### 11.21.1 Definitions

In this rule 11.21:

**Amending Rule** means the National Electricity Amendment (NEM Reliability Settings: Information Safety Net and Directions) Rule 2008 No. 6.

**Commencement date** means the date the Amending Rule commences operation.

### 11.21.2 EAAP guidelines

All actions taken by *NEMMCO* prior to the commencement date in anticipation of the commencement date for the purposes of preparing and publishing the first



*EAAP guidelines* as required by clause 3.7C(p) are taken to satisfy the equivalent actions required for *EAAP guidelines* under rule 3.7C.

### 11.21.3 NEMMCO procedures for exercising RERT

- (a) All actions taken by *NEMMCO* prior to the commencement date in anticipation of the commencement date for the purposes of developing and publishing the procedures for the exercise of the *RERT* as required by clause 3.20.7(e) are taken to satisfy the equivalent actions required for the procedures under clause 3.20.7.
- (b) *NEMMCO* may develop, *publish*, and may amend from time to time, interim procedures for the exercise of the *RERT* under rule 3.20 at any time before it *publishes* the first procedures for that purpose as required by clause 3.20.7(e). For these purposes:
  - (1) *NEMMCO* is not required to develop, *publish* or amend those interim procedures in accordance with the *Rules consultation procedures*;
  - (2) those interim procedures must take into account the *RERT principles* and *RERT guidelines* or, if there are no *RERT guidelines* in existence at that time, the draft guidelines referred to in clause 11.21.4(b);
  - (3) those interim procedures must include measures as referred to in clause 3.20.7(e);
  - (4) those interim procedures will cease to apply when *NEMMCO publishes* the first procedures for the exercise of the *RERT* as required by clause 3.20.7(g); and
  - (5) for so long as those interim procedures apply, references in rule 3.20 to the procedures referred to in clause 3.20.7(e) are taken to include references to those interim procedures.

### 11.21.4 RERT guidelines

- (a) All actions taken by the *Reliability Panel* prior to the commencement date in anticipation of the commencement date for the purposes of developing and *publishing* the first *RERT guidelines* as required by clause 3.20.8(c) are taken to satisfy the equivalent actions required for *RERT guidelines* under clause 3.20.8.
- (b) If it exercises the *RERT* under rule 3.20 prior to the *publication* of the first *RERT guidelines* as required by clause 3.20.8(c), *NEMMCO* must take into account the draft guidelines set out in Appendix C.3 to the document entitled 'Comprehensive Reliability Review: Second Interim Report' issued by the *Reliability Panel* and dated August 2007.

### **11.21.5 Timetable**

- (a) *NEMMCO* must amend the *timetable* in accordance with clause 3.4.3(b) to take into account the Amending Rule and those amendments are to take effect from the commencement date.
- (b) All actions taken by *NEMMCO* prior to the commencement date in anticipation of the commencement date to amend the *timetable* as required by paragraph (a) are taken to satisfy the equivalent action required under clause 3.4.3(b).

### **11.21.6 Power system security and reliability standards**

- (a) The *Reliability Panel* must amend the *power system security and reliability standards* in accordance with clause 8.8.3 to take into account the Amending Rule and those amendments are to take effect from the commencement date.
- (b) All actions taken by the *Reliability Panel* prior to the commencement date in anticipation of the commencement date to amend the *power system security and reliability standards* as required by paragraph (a) are taken to satisfy the equivalent action required under clause 8.8.3.

### **11.21.7 Report on statement of opportunities**

All actions taken by *NEMMCO* prior to the commencement date in anticipation of the commencement date for the purposes of preparing and providing a report to the *Reliability Panel* as required by clause 3.13.3(u) are taken to satisfy the equivalent actions required for preparing and providing a report under clause 3.13.3(u).

### **11.21.8 Methodology for dispatch prices and ancillary services prices**

Minor or administrative amendments made by *NEMMCO* to the methodology for determining *dispatch prices* and *ancillary service prices* developed in accordance with clause 3.9.3(e) prior to the commencement date are taken to have been made under clause 3.9.3(g).

## Part Q Regulatory Test Thresholds and Information Disclosure on Network Replacements

### 11.22 Rules consequential on the making of the National Electricity Amendment (Regulatory Test Thresholds and Information Disclosure on Network Replacements) Rule 2008

#### 11.22.1 Definitions

In this rule 11.22:

**amended definitions** means the definitions of "new large transmission network asset" and "new small transmission network asset" as amended by the Amending Rule.

**Amending Rule** means the National Electricity Amendment (Regulatory Test Thresholds and Information Disclosure on Network Replacements) Rule 2008.

**commencement date** means the date on which the Amending Rule commences operation.

**old definitions** means the definitions of "new large transmission network asset" and "new small transmission network asset" as in force immediately before the commencement date.

#### 11.22.2 Amending Rule does not affect existing regulatory test

The old definitions continue to apply in place of the amended definitions following the commencement date in respect of:

- (a) a *new small transmission network asset* for which a *Transmission Network Service Provider* has set out the matters required under clauses 5.6.2A(b)(4) and (5) in an *Annual Planning Report published* prior to the commencement date;
- (b) a *new small transmission network asset* not identified in an *Annual Planning Report* for which a *Transmission Network Service Provider* has *published* a report required under clause 5.6.6A(c) prior to the commencement date; and
- (c) a *new large transmission network asset* for which a *Transmission Network Service Provider* has taken an action or commenced a process under the *Rules* which relies on or is referenced to the *Regulatory Test* (such as *publishing* an application notice under clause 5.6.6(c)) that has not completed prior to the commencement date.

## Part R Performance Standard Compliance of Generators

### 11.23 Rules consequential on the making of the National Electricity Amendment (Performance Standards Compliance of Generators) Rule 2008

#### 11.23.1 Definitions

For the purposes of this rule 11.23:

**Amending Rule** means the National Electricity Amendment (Performance Standards Compliance of Generators) Rule 2008.

**Old Clause 5.7.3(b)** means the clause 5.7.3(b) in the version of the *Rules* that was in force immediately prior to the commencement of the Amending Rule.

#### 11.23.2 Application of rule 11.23 for compliance programs implemented immediately after the commencement of the Amending Rule

*Registered Participants* are not required to comply with the obligation set out in rule 4.15(b) until 3 months after the day on which the *Reliability Panel* published its initial *template for generator compliance programs* under clause 8.8.3 of the *Rules* or until a date determined by the *Reliability Panel*.

#### 11.23.3 Application of rule 11.23 for compliance programs implemented immediately prior to the commencement of the Amending Rule

*Registered Participants* which implemented compliance programs under the Old Clause 5.7.3(b) must maintain compliance with those programs until 3 months after the day on which the *Reliability Panel* published its initial *template for generator compliance programs* under clause 8.8.3 of the *Rules* or until a date determined by the *Reliability Panel*.

#### 11.23.4 Application of rule 11.23 for compliance programs not implemented immediately prior to the commencement of the Amending Rule

*Registered Participants* which have not implemented compliance programs under the Old Clause 5.7.3(b) must implement and maintain compliance programs under the Old Clause 5.7.3(b) until 3 months after the day on which the *Reliability Panel* published its initial *template for generator compliance programs* under clause 8.8.3 of the *Rules* or until a date determined by the *Reliability Panel*.

## Part S Compensation Arrangements under Administered Pricing

### 11.24 Rules consequential on the making of National Electricity Amendment (Compensation Arrangements under Administered Pricing) Rule 2008

#### 11.24.1 Definitions

In this rule 11.24:

**Amending Rule** means the National Electricity Amendment (Compensation Arrangements under Administered Pricing) Rule 2008.

**commencement date** means the date the Amending Rule commences operation.

#### 11.23.2 Compensation Guidelines

All actions taken by the *AEMC* prior to the commencement date in anticipation of the commencement date for the purposes of developing and *publishing* the first compensation guidelines as required by clause 3.14.6(e) are taken to satisfy the equivalent actions required for compensation guidelines under clause 3.14.6(f).

## Part U Confidentiality Arrangements concerning Information required for Power System Studies

### 11.25 Rule consequential on the making of the National Electricity Amendment (Confidentiality Arrangements in Respect of Information Required for Power System Studies) Rule 2009

#### 11.25.1 Definitions

For the purposes of rule 11.25:

**Amending Rule** means the National Electricity Amendment (Confidentiality Arrangements in Respect of Information Required for Power System Studies) Rule 2009.

**Commencement date** means the date on which the Amending Rule commences operation.

#### 11.25.2 Transitional arrangements for the provision of information

- (a) A *Generator* must provide *NEMMCO* with a *releasable user guide* by 29 May 2009 or a date which *NEMMCO* considers to be reasonable in the

circumstances but which must be no later than 27 November 2009, except in relation to the following information:

- (1) information provided to *NEMMCO* before 15 March 2007 that *NEMMCO* holds at the commencement date only to the extent that such information is of a type required in a *releasable user guide* and was authorized by the *Rules* to be released for the same purpose as intended by clause 3.13.3(1) as at the date that information was provided to *NEMMCO*; and
  - (2) information provided to *NEMMCO* after 15 March 2007 only if the relevant *Generator* has provided to *NEMMCO* model source code under clause S5.2.4(b)(6), being the provider identified in clause 3.13.3(12), and provides its written consent to *NEMMCO* for *NEMMCO* to use information that *NEMMCO* holds at the commencement date of a type required in a *releasable user guide* for the purposes of clause 3.13.3(1).
- (b) A 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, must provide *NEMMCO* with a *releasable user guide* by 29 May 2009 or a date which *NEMMCO* considers to be reasonable in the circumstances but which must be no later than 27 November 2009, except in relation to the following information:
- (1) information provided to *NEMMCO* before 15 March 2007 that *NEMMCO* holds at the commencement date only to the extent that such information is of a type required in a *releasable user guide* and was authorized by the *Rules* to be released for the same purpose as intended by clause 3.13.3(1) as at the date that information was provided to *NEMMCO*; and
  - (2) information provided to *NEMMCO* after 15 March 2007 only if the relevant person described in this paragraph as required under the *Rules* to register as a *Generator*, has provided to *NEMMCO* model source code under clause S5.2.4(b)(6), being the provider identified in clause 3.13.3(12), and provides its written consent to *NEMMCO* for *NEMMCO* to use information that *NEMMCO* holds at the commencement date of a type required in a *releasable user guide* for the purposes of clause 3.13.3(1).
- (c) If a *Generator* provided to *NEMMCO* model source code under clause S5.2.4(b)(6) between 15 March 2007 and the commencement date:
- (1) it may provide to *NEMMCO* a substitute model source code in respect of its *generating system* in conjunction with a *releasable user guide* provided under rule 11.25.2(a); and

- (2) that substitute model source code will be taken to be the model source code provided under clause S5.2.4(b)(6) only if it complies with clause S5.2.4(c).
- (d) If a 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, provided to *NEMMCO* model source code under clause S5.2.4(b)(6) between 15 March 2007 and the commencement date:
  - (1) it may provide to *NEMMCO* a substitute model source code in respect of its *generating system* in conjunction with a *releasable user guide* provided under rule 11.25.2(b); and
  - (2) that substitute model source code will be taken to be the model source code provided under clause S5.2.4(b)(6) only if it complies with clause S5.2.4(c).
- (e) *Releasable user guide* information provided to *NEMMCO* under clauses 11.25.2(a) and 11.25.2(b) is deemed to be *releasable user guide* information provided under clause S5.2.4(b)(8) and for the purposes of clause 3.13.3(1).
- (f) *NEMMCO* must implement any changes to its systems needed to comply with its obligations under the Amending Rule within 12 months of the commencement date.

## Part V WACC Reviews: Extension of Time

### 11.26 Rule consequential on the making of the National Electricity Amendment (WACC Reviews: Extension of Time) Rule 2009

#### 11.26.1 Definitions

In this rule 11.26:

**regulatory control period 2010-2015** means the *regulatory control period* commencing on 1 July 2010 in relation to *Distribution Network Service Providers* in South Australia and Queensland.

#### 11.26.2 Extension of time to submit a regulatory proposal for the regulatory control period 2010-2015

- (a) This rule 11.26 applies to *Distribution Network Service Providers* in South Australia and Queensland.

- (b) Despite clause 6.8.2(b)(1), where a relevant *Distribution Network Service Provider* is required to submit a *regulatory proposal* for the *regulatory control period* 2010-2015 to the *AER* under clause 6.8.2(a), that *regulatory proposal* must be submitted by 1 July 2009.

## Part W National Transmission Statement

### 11.27 Rules consequent on the making of the National Electricity Amendment (National Transmission Statement) Rule 2009

#### 11.27.1 Definitions

For the purposes of this rule 11.27:

**Amending Rule 2009** means the National Electricity Amendment (National Transmission Statement) Rule 2009.

**commencement date** means the date on which the Amending Rule 2009 commences operation.

**jurisdictional planning body** means an entity nominated from time to time by the relevant *Minister of a participating jurisdiction* as having *transmission system* planning responsibility in that *participating jurisdiction*.

**National Transmission Network Development Plan** means the document that is to replace the *Annual National Transmission Statement*, the first of which is to be *published* by *NEMMCO* after 2009

**National Transmission Statement** means the statement *published* by *NEMMCO* in accordance with clause 11.27.4.

**National Transmission Statement review** or **NTS review** means the review conducted by *NEMMCO* in accordance with clause 11.27.4.

#### 11.27.2 Purpose

The purpose of this rule 11.27 is to require *NEMMCO* to publish a National Transmission Statement by 31 December 2009 in the place of an *Annual National Transmission Statement* for 2009. This will facilitate the efficient transition from the *Annual National Transmission Statement* in 2008 to the first National Transmission Network Development Plan to be *published* after 2009.

#### 11.27.3 Application of rule 11.27

From the commencement date, rule 11.27 applies despite any other provision of the *Rules* (including any guideline or procedure made under the *Rules*) applicable to the *ANTS review* and *publication* of an *Annual National Transmission Statement* for 2009.



#### 11.27.4 National Transmission Statement

- (a) *NEMMCO* must conduct a review of the following matters:
- (1) *national transmission flow paths*;
  - (2) historical and forecast utilisation of *national transmission flow paths*;
  - (3) historical and forecast *constraints* in respect of *national transmission flow paths*, including those identified in the *Annual Planning Reports*;
  - (4) *augmentations* proposed by each *Transmission Network Service Provider* in their most recent *Annual Planning Reports* and the manner in which the proposed *augmentations* relate to the *national transmission flow paths*;
  - (5) other *network* and non-*network* options identified during the consultation described in paragraph (b) and the manner in which the options relate to the *national transmission flow paths*,
- (the “**NTS review**”) and prepare and *publish* the National Transmission Statement by 31 December 2009 setting out the results of the NTS review.
- (b) *NEMMCO* must, in carrying out the NTS review, consult with *Registered Participants* and *interested parties* in relation to:
- (1) the data and assumptions to be used as part of the review;
  - (2) the potential options for addressing identified *constraints* impacting *national transmission flow paths*; and
  - (3) the content of the National Transmission Statement.
- (c) In carrying out the NTS review, *NEMMCO* must consider the following matters:
- (1) the location of the current *national transmission flow paths* and the current capacities, *constraints* and congestion points on those flow paths;
  - (2) the location of the potential *national transmission flow paths* over the next 20 years, and the likely capabilities, *constraints* and congestion points on those flow paths;
  - (3) the quantity of electricity which flowed, the periods in which the electricity flowed, and *constraints*, on the *national transmission flow paths* over the previous *financial year* or such other period as determined by *NEMMCO* having regard to data which is available to *NEMMCO*;
  - (4) the forecast quantity of electricity which is expected to flow, and the periods in which the electricity is expected to flow, the magnitude and significance of future *network losses* and *constraints* on the current and

- potential *national transmission flow paths* over the current *financial year* or such other period as determined by *NEMMCO* having regard to data which is available to *NEMMCO*;
- (5) the projected capabilities of the existing *transmission network* and the *network control ancillary services* required to support existing and future *transmission network* capabilities;
  - (6) demand forecasts for the next 20 *financial years*;
  - (7) possible scenarios for additional *generation* and demand side options to meet demand forecasts;
  - (8) relevant intra-jurisdictional developments and any incremental works which may be needed to coordinate *national transmission flow path* planning with intra-jurisdictional planning;
  - (9) the options for relieving forecast *constraints* on the *national transmission flow paths* identified in the *Annual Planning Reports* or through the consultation required under paragraph (b); and
  - (10) such other matters as *NEMMCO*, in consultation with the *participating jurisdictions*, considers are appropriate.
- (d) In considering the matters described in paragraph (c), *NEMMCO* must have regard to:
- (1) the *Annual Planning Reports* published in 2009; and
  - (2) information obtained for the purposes of preparing the *statement of opportunities* to be published in 2009;
- and may include information from the *Annual Planning Reports* and the *statement of opportunities* in the National Transmission Statement.
- (e) In carrying out the NTS review, *NEMMCO* may seek the assistance of each jurisdictional planning body.
  - (f) *NEMMCO* may by written notice request a jurisdictional planning body to provide *NEMMCO* with any additional information or documents reasonably available to it that *NEMMCO* reasonably requires for the purpose of the NTS review.
  - (g) A jurisdictional planning body must comply with a written notice from *NEMMCO* issued under paragraph (f).
  - (h) *NEMMCO* may only use information or documents provided in accordance with paragraphs (f) and (g) for the purpose of preparing the National Transmission Statement or, where relevant, the *statement of opportunities* to be published in 2009.

### **11.27.5 Scope and Content of National Transmission Network Development Plan**

The National Transmission Statement must also identify the expected scope and content of the first National Transmission Network Development Plan.

### **11.27.6 Energy Adequacy Assessment Projection**

Despite anything to the contrary in rule 3.7C, until the first *National Transmission Network Development Plan* is published, clause 3.7C(b)(6)(B) is to be taken as requiring the *EAAP* to take into account, where relevant, the matters *NEMMCO* is required to consider for the purposes of clause 11.27.4(c) in carrying out the *NTS review*.

### **11.27.7 Amendment to Last Resort Power**

The National Transmission Statement is deemed to be an *Annual National Transmission Statement* for 2009 for the purposes of clause 5.6.4(g)(2).

### **11.27.8 Actions taken prior to commencement of Rule**

Any relevant action taken by *NEMMCO* prior to the commencement date is taken to have been made or done in accordance with the *Rules* for the purpose of the Amending Rule 2009.

## **Part XX Congestion Information Resource (2009 amendments)**

### **11.X Rules consequent on the making of the National Electricity Amendment (Congestion Information Resource) Rule 2009**

#### **11.X.1 Definitions**

In this rule 11.X:

**Amending Rule** means the National Electricity Amendment (Congestion Information Resource) Rule 2009.

**commencement date** means the day on which the Amending Rule commences operation.

**interim congestion information resource** means the information resource developed and *published* in accordance with rule 11.X.2.

**network outage schedule** means a schedule developed by *NEMMCO* based on information received from *Transmission Network Service Providers* in accordance with rule 3.7A that lists the planned *network outages* on each *transmission system* for a period of up to two years in advance and that identifies

the likelihood of each planned *network outage* proceeding following an assessment of forecast demand for the period of the planned *network outage*.

## **11.X.2 Interim congestion information resource**

- (a) Pending the development and *publication* of the *congestion information resource* under rule 3.7A, NEMMCO must develop an interim congestion information resource to implement the *congestion information resource objective* in accordance with this rule 11.X. NEMMCO is not required to follow the *Rules consultation procedures* in developing the interim congestion information resource.
- (b) The interim congestion information resource must include:
- (1) the network outage schedule;
  - (2) historical data on *mis-pricing* at *transmission network* nodes in the *national electricity market*;
  - (3) the following information on *network outages* planned for the subsequent thirteen months that, in the reasonable opinion of the relevant *Transmission Network Service Provider*, will have or are likely to have a material effect on transfer capabilities:
    - (i) details of the forecast timing and the factors affecting the timing of planned *network outages* and the likelihood that the planned timing will vary; and
    - (ii) details of the reasons for the planned *network outage*, including the nature, and a description, of the works being carried out during the planned *network outage*, if any;
  - (4) the following information on planned *network outages* referred to in subparagraph (3):
    - (i) an assessment of the projected impact on *intra-regional power transfer capabilities*, the accuracy of which must be appropriate to implement the *congestion information resource objective*; and
    - (ii) an assessment of the projected impact on *inter-regional power transfer capabilities*, the accuracy of which must be appropriate to implement the *congestion information resource objective*;
  - (5) any other information with respect to planned *network outages* referred in subparagraph (3) that NEMMCO considers relevant to implement the *congestion information resource objective*; and

- (6) any other information that NEMMCO, in its reasonable opinion, considers relevant to implement the congestion information resource objective.
- (c) Each month, in accordance with the timetable for the provision of information to medium term PASA, each Transmission Network Service Provider must provide to NEMMCO:
- (1) the information referred to in paragraphs (b)(3) and (b)(4); and
  - (2) for the purposes of paragraph (b)(5), any other information with respect to the planned network outages referred to in paragraph (b)(3) that NEMMCO considers relevant to implement the congestion information resource objective.
- (d) NEMMCO must publish the interim congestion information resource by [DATE A].
- Note: DATE A is intended to be 6 months after this Rule commences operation.
- (e) NEMMCO must determine the frequency of updating (whether in whole or in part) and publishing the information contained in the interim congestion information resource.
- (f) At intervals determined by NEMMCO under paragraph (e), NEMMCO must, in accordance with the timetable, update and publish the interim congestion information resource.
- (g) Transmission Network Service Providers must provide NEMMCO with such information as is requested by NEMMCO for inclusion in the interim congestion information resource in accordance with paragraph (b). This information is to be provided to NEMMCO in a form which clearly identifies confidential information.
- (h) Where there has been a material change to the information provided by a Transmission Network Service Provider under paragraph (g), the Transmission Network Service Provider must provide NEMMCO with the revised information as soon as practicable.
- (i) Information contained in the interim congestion information resource which has been provided by, or has been derived from information provided by, a Transmission Network Service Provider:
- (1) represents the Transmission Network Service Provider's current intentions and best estimates regarding planned network outages 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*.
- (j) NEMMCO must not publish confidential information as part of, or in connection with, the interim congestion information resource.
- (k) NEMMCO must amend the *timetable* in accordance with clause 3.4.3(b) to take into account the Amending Rule and those amendments are to take effect from the commencement date.
- (l) All actions taken by NEMMCO prior to the commencement date in anticipation of the commencement date to amend the *timetable* as required by paragraph (k) are taken to satisfy the equivalent action required under clause 3.4.3(b).

## Appendix 1 Form in which Chapter 6 applies to New South Wales and the Australian Capital Territory for the Regulatory Control Period 2009-2014

*Note:*

*This Appendix contains transitional Chapter 6 and is based on general Chapter 6. Matter omitted from numbered provisions of general Chapter 6 is indicated by a row of asterisks (\*\*\*\*\*).*

### Chapter 6 Economic Regulation of Distribution Services

#### Part A Introduction

##### 6.1 Introduction to Chapter 6

##### 6.1.1 AER's regulatory responsibility

The *AER* is responsible, in accordance with this Chapter, for the economic regulation of *distribution services* provided by means of, or in connection with, *distribution systems* that form part of the *national grid*.

##### 6.1.2 Structure of this Chapter

- (a) This Chapter deals with the classification and economic regulation of *distribution services*.
- (b) It is divided into parts as follows:
  - (1) this Part is introductory;
  - (2) Part B provides for the classification of *distribution services* and forms of control for *standard control services* and confers power on the *AER* to determine the forms of control for *alternative control services*, and to make distribution determinations;
  - (3) Part C sets out the building block approach to the regulation of services classified as *standard control services*;
  - (4) Part D regulates the prices that may be charged by EnergyAustralia for the provision of services classified as *negotiated distribution services*;
  - (4A) Part DA regulates the prices for negotiable components of *direct control services* (NSW and ACT);

- (5) Part E sets out the procedures for making a distribution determination;
- (6) Part F regulates cost allocation;
- (7) \*\*\*\*\*
- (8) Part H deals with ring-fencing;
- (9) Part I deals with *tariff classes* and tariffs;
- (10) Part J deals with billing and settlements;
- (11) Part K deals with prudential requirements, prepayments and capital contributions;
- (12) Part L deals with dispute resolution;
- (13) Part M deals with the disclosure of transmission and distribution charges.

### **6.1.3 Access to direct control services and negotiated distribution services**

- (a) Subject to and in accordance with the *Rules*:
  - (1) a person (a *Service Applicant*) may apply to a *Distribution Network Service Provider* for provision of *direct control services* or *negotiated distribution services*;
  - (2) a *Distribution Network Service Provider* must provide *direct control services* or *negotiated distribution services* (as the case may be) on *terms and conditions of access* as determined under Chapters 4, 5, this Chapter 6 and Chapter 7 of the Rules.
- (b) The *terms and conditions* of access are:
  - (1) in relation to *negotiated distribution services*:
    - (i) the price of those services (including, if relevant, *access charges*); and
    - (ii) other terms and conditions for the provision of those services;
  - (2) in relation to *direct control services*:
    - (i) subject to Part DA:
      - (A) the price of those services under the *approved pricing proposal*, except as provided by subparagraph (B); and



(B) in the case of EnergyAustralia’s prescribed (transmission) standard control services, the price of those services under EnergyAustralia’s approved pricing methodology; and

(ii) other terms and conditions for the provision of those services.

#### **6.1.4 Prohibition of DUOS charges for the export of energy**

- (a) A *Distribution Network Service Provider* must not charge a *Distribution Network User* distribution use of system charges for the export of electricity generated by the user into the *distribution network*.
- (b) This does not, however, preclude charges for the provision of *connection services*.

#### **6.1.5 Application of this Chapter to certain transmission assets – ActewAGL, Country Energy and Integral Energy Australia**

- (a) This clause 6.1.5 applies to ActewAGL, Country Energy and Integral Energy Australia (each of which is a “relevant provider” for the purposes of this clause).
- (b) For the purposes of the regulatory control period 2009-2014:
  - (1) each part of a relevant provider’s *network* that would, but for this clause, be part of the provider’s *transmission network* is deemed to be part of the provider’s *distribution network* for the purposes of this Chapter 6 and Chapter 6A; and
  - (2) despite anything in those Chapters, those Chapters have effect accordingly.
- (c) This clause 6.1.5 does not affect the operation of the *Rules*, apart from:
  - (1) this Chapter 6 and Chapter 6A; and
  - (2) the definitions of *distribution network* and *transmission network* in Chapter 10 in relation to this Chapter 6 and Chapter 6A.
- (d) However, the relevant providers are not required to submit revenue proposals under clause 6A.10.1.

#### **6.1.6 Application of this Chapter to the EnergyAustralia transmission support network**

- (a) This clause 6.1.6 applies to EnergyAustralia.
- (b) For the purposes of the regulatory control period 2009-2014:

- (1) the EnergyAustralia transmission support network is deemed to be part of EnergyAustralia's *distribution network* for the purposes of this Chapter and Chapter 6A; and
  - (2) despite anything in those Chapters, those Chapters have effect accordingly.
- (c) A service that is provided by EnergyAustralia by means of, or in connection with, the EnergyAustralia transmission support network and that, but for this clause, would be a *prescribed transmission service* is:
- (1) deemed to be classified as a *direct control service* and further classified as a *standard control service*; and
  - (2) referred to in this Chapter as an "EnergyAustralia prescribed (transmission) standard control service".
- (d) A service that is provided by EnergyAustralia by means of, or in connection with, the EnergyAustralia transmission support network and that, but for this clause, would be a *negotiated transmission service* is:
- (1) deemed to be classified as a *negotiated distribution service*;
  - (2) referred to in the Rules as an "EnergyAustralia negotiated distribution service".
- (e) Part J of Chapter 6A applies to EnergyAustralia prescribed (transmission) standard control services to the exclusion of Parts I, J and K, and so applies as if:
- (1) references in Part J of Chapter 6A to a *prescribed transmission service* were references to Energy Australia prescribed (transmission) standard control services; and
  - (2) the reference in clause 6A.22.1 to clause 6A.3.2 were a reference to rules 6.6 and 6.13;
- and with any other necessary modifications.
- (f) This clause 6.1.6 does not affect the operation of the *Rules*, apart from:
- (1) this Chapter 6 and Chapter 6A; and
  - (2) the definitions of *distribution network* and *transmission network* in Chapter 10 in relation to this Chapter 6 and Chapter 6A.

### 6.1.7 Definitions

- (a) In this Chapter (including Schedules 6.1 and 6.2):

“ActewAGL” means the joint venture between ACTEW Distribution Limited ACN 073 025 224 and Alinta GCA Pty Ltd ACN 008 552 663 providing *distribution services* in the Australian Capital Territory, or any successor or successors of that joint venture.

“commencement date” means the date of commencement of transitional Chapter 6.

“Cost Allocation Method” means:

- (a) for NSW Distribution Network Service Providers – the Cost Allocation Method approved under clause 6.15.6 as in force from time to time; or
- (b) for the ACT Distribution Network Service Provider – the Cost Allocation Method approved under clause 6.15.8 as in force from time to time.

“Country Energy” means the energy services corporation of that name, which is constituted under section 7 of the Energy Services Corporations Act 1995 (NSW) and specified in Part 2 of Schedule 1 to that Act, or any successor or successors of that corporation.

“EnergyAustralia” means the energy services corporation of that name, which is constituted under section 7 of the Energy Services Corporations Act 1995 (NSW) and specified in Part 2 of Schedule 1 to that Act, or any successor or successors of that corporation.

“EnergyAustralia negotiated distribution service” – see clause 6.1.6(d).

“EnergyAustralia prescribed (transmission) standard control service” – see clause 6.1.6(c).

“EnergyAustralia transmission support network” means any part of a network owned, controlled or operated by EnergyAustralia and operating between 66 kV and 220 kV that operates in parallel to and provides support to the higher voltage *transmission network*.

“ICRC” means the Independent Competition and Regulatory Commission of the Australian Capital Territory, which is established under section 5(1) of the Independent Competition and Regulatory Commission Act 1997 (ACT).

“Integral Energy Australia” means the energy services corporation of that name, which is constituted under section 7 of the Energy Services Corporations Act 1995 (NSW) and specified in Part 2 of Schedule 1 to that Act, or any successor or successors of that corporation.

“IPART” means the Independent Pricing and Regulatory Tribunal of New South Wales, which is established under section 5(1) of the Independent Pricing and Regulatory Tribunal Act 1992 (NSW).

“regulatory control period 2004-2009” means the regulatory control period of 5 years commencing on 1 July 2004.

“regulatory control period 2009-2014” means the regulatory control period of 5 years commencing on 1 July 2009 and referred to in rule 11.15.

“transitional Chapter 6” means this Chapter (being transitional Chapter 6 as defined in rule 11.15).

- (b) In this Chapter and in rule 11.15:
- (1) a reference to the NSW Distribution Network Service Providers is a reference to Country Energy, EnergyAustralia and Integral Energy Australia; and
  - (2) a reference to the ACT Distribution Network Service Provider is a reference to ActewAGL.

## **Part B Classification of Distribution Services and Distribution Determinations**

### **6.2 Classification**

#### **6.2.1 \*\*\*\*\***

#### **6.2.2 \*\*\*\*\***

#### **6.2.3 \*\*\*\*\***

#### **6.2.3A Classes and subclasses of distribution services**

- (a) *Distribution services* to be provided by a *Distribution Network Service Provider* are divided into the following 3 classes:

- (1) *direct control services*;
- (2) *negotiated distribution services*;
- (3) *unregulated distribution services*.

*Note:*

*Certain services provided by means of, or in connection with, the EnergyAustralia transmission support network (which is deemed by clause 6.1.6(b) to be part of EnergyAustralia's distribution network) are deemed by clause 6.1.6(d) to be classified as negotiated distribution services for certain purposes.*

- (b) *Direct control services* are further divided into the following 2 subclasses:
- (1) *standard control services*; and
  - (2) *alternative control services*.

### **6.2.3B Classification for NSW Distribution Network Service Providers**

- (a) A *distribution service* that is provided by a NSW Distribution Network Service Provider and that was determined by the IPART to be a prescribed distribution service (for the purposes of the regulatory control period 2004-2009) is deemed (for the purposes of the regulatory control period 2009-2014) to be classified as a *direct control service* and further classified as a *standard control service*.

*Note:*

*The IPART's Final Determination No 2, 2004 (relating to NSW Electricity Distribution Pricing 2004/05 to 2008/09) provided that prescribed distribution services include:*

- *Distribution Use of System Services*
  - *Private Power Line Inspections and Customer Installation Inspections*
  - *certain Monopoly Services*
  - *certain Miscellaneous Services*
  - *certain Emergency Recoverable Works*.
- (b) A *distribution service* that is provided by a NSW Distribution Network Service Provider and that was determined by the IPART to be an excluded distribution service (for the purposes of the regulatory control period 2004-2009) is deemed (for the purposes of the regulatory control period 2009-2014):
- (1) in the case of the excluded distribution service of the construction and maintenance of public lighting infrastructure – to be classified as a *direct control service* and further classified as an *alternative control service*;

- (2) in the case of any other excluded distribution service – to be classified as:
- (i) an unregulated *distribution service*, unless the AER has made a determination under paragraph (e) in relation to that *distribution service*; or
  - (ii) an *alternative control service*, if the AER has made a determination under paragraph (e) in relation to that *distribution service*.

*Note:*

*1. Other distribution services provided by a NSW Distribution Network Service Provider are unclassified and not regulated under the Rules.*

*2. The IPART's Final Determination No 2, 2004 (relating to NSW Electricity Distribution Pricing 2004/2005 to 2008/2009) determined that the following Distribution Services are Excluded Distribution Services):*

- *the construction and maintenance of Public Lighting Infrastructure*
- *Customer Funded Connections*
- *Customer Specific Services*
- *Type 1 to 4 Metering Services.*

- (c) A NSW Distribution Network Service Provider is, in relation to a *distribution service* classified as an unregulated *distribution service*, required to comply substantially with the relevant requirements of the provisions of Rule 2004/1 (Regulation of Excluded Distribution Services) made by the IPART in relation to the regulatory control period 2004-2009.

*Note:*

*Distribution services provided by a NSW Distribution Network Service Provider that are unclassified are not regulated under the Rules, and accordingly are not required to comply with the requirements of Rule 2004/1.*

- (d) For the purposes of paragraph (c), the provisions of Rule 2004/1 have effect as if references to the IPART were references to the AER and references to the regulatory control period 2004-2009 were references to the regulatory control period 2009-2014, and with any other necessary modifications.
- (e) The AER may, at any time during the regulatory control period 2009-2014, determine that a NSW Distribution Network Service Provider is not or has

ceased to be in substantial compliance with the requirements of the provisions referred to in paragraph (c) if the AER has:

- (1) given the provider a written notice inviting the provider to show cause within a specified period of at least 2 weeks why the *AER* should not make the determination and setting out the grounds on which the *AER* would make the determination; and
  - (2) taken into consideration any written submissions made by the provider to the *AER* within that period in response to the notice.
- (f) Once a *distribution service* has been classified as an *alternative control service* because of a determination by the *AER* under paragraph (e), the *distribution service* cannot during the remainder of the regulatory control period 2009-2014 be classified again as an unregulated *distribution service*, unless it appears to the *AER* that the determination is affected by a material error or deficiency of a kind referred to in rule 6.13(a).
- (g) Provisions having effect as referred to in paragraph (c) may be included in a distribution determination in any appropriate format.
- (h) Once a *distribution service* has been classified as an *alternative control service* because of a determination by the *AER* under paragraph (e), the *AER* must make such amendments to the relevant distribution determination as are necessary to regulate the *distribution service* as an *alternative control service*.
- (i) When making the distribution determination for a NSW Distribution Network Service Provider, the *AER* may, with the agreement of the provider, vary the deemed classification effected by this clause 6.2.3B of a *distribution service* provided by the provider.
- (j) A deemed or varied classification under this clause 6.2.3B forms part of a distribution determination and operates for the regulatory control period 2009-2014.

### **6.2.3C Classification for ACT Distribution Network Service Provider**

- (a) A *distribution service* that is provided by the ACT Distribution Network Service Provider and that was determined by the ICRC to be a prescribed distribution service (for the purposes of the regulatory control period 2004-2009) is deemed (for the purposes of the regulatory control period 2009-2014) to be classified as a *direct control service* and further classified as a *standard control service*.
- (b) A *distribution service* that is provided by the ACT Distribution Network Service Provider and that was determined by the ICRC to be an excluded distribution service (for the purposes of the regulatory control period 2004-

2009) is deemed (for the purposes of the regulatory control period 2009-2014) to be classified as a *direct control service* and further classified as an *alternative control service*.

- (c) When making the distribution determination for the ACT Distribution Network Service Provider, the *AER* may, with the agreement of the provider, vary the deemed classification effected by this clause 6.2.3C of a *distribution service* provided by the provider.
- (d) A deemed or varied classification under this clause 6.2.3C forms part of a distribution determination and operates for the regulatory control period 2009-2014.

*Note:*

*The ICRC's Final Decision-Investigation into prices for electricity distribution services in the ACT-Report No 6 of 2004 (relating to ACT Electricity Distribution Pricing 2004/2005 to 2008/2009) provided that prescribed distribution services include all distribution services provided by ActewAGL, with the exception of the provision of and servicing of meters for customers consuming fewer than 160 megawatt hours per annum, including:*

- *meter testing*
- *meter reading*
- *meter checking*
- *the processing of metering data*
- *the provision of non-standard meters.*

*The services covered by the exception are accordingly Excluded Distribution Services.*

#### **6.2.4 Duty of AER to make distribution determinations**

- (a) The *AER* must make a distribution determination for each *Distribution Network Service Provider*.
- (b) When the *AER* makes a distribution determination it must follow the process set out in Part E.
- (c) \*\*\*\*\*
- (d) \*\*\*\*\*



## 6.2.5 Control mechanisms for direct control services

- (a) A distribution determination is to impose controls over the prices of *direct control services*, the revenue to be derived from *direct control services* or both.
- (b) \*\*\*\*\*
- (c) \*\*\*\*\*
- (c1) The control mechanism for:
  - (1) subject to subparagraph (3), *standard control services* provided by a NSW Distribution Network Service Provider in the regulatory control period 2009-2014:
    - (i) must be substantially the same as that determined by the IPART for the corresponding prescribed distribution services provided in the regulatory control period 2004-2009; and
    - (ii) may, with the agreement of the provider, apply differently for different categories of services; and
  - (2) *standard control services* provided by the ACT Distribution Network Service Provider in the regulatory control period 2009-2014 must be substantially the same as that determined by the ICRC for prescribed distribution services provided in the regulatory control period 2004-2009; and
  - (3) EnergyAustralia prescribed (transmission) standard control services provided in the regulatory control period 2009-2014 and referred to in clause 6.1.6(c) must be substantially the same as that determined by the ACCC for the corresponding *prescribed transmission services* provided in the regulatory control period 2004-2009.
- (c2) The control mechanism for *alternative control services* may consist of:
  - (1) a schedule of fixed prices;
  - (2) caps on the prices of individual services;
  - (3) caps on the revenue to be derived from a particular combination of services;
  - (4) tariff basket price control;
  - (5) revenue yield control;
  - (6) a combination of any of the above.

- (d) In deciding on a control mechanism for *alternative control services*, the AER must have regard to:
- (1) the potential for development of competition in the relevant market and how the control mechanism might influence that potential; and
  - (2) the possible effects of the control mechanism on administrative costs of the AER, the *Distribution Network Service Provider* and users or potential users; and
  - (3) the regulatory arrangements (if any) applicable to the relevant service immediately before the commencement of the distribution determination; and
  - (4) the desirability of consistency between regulatory arrangements for similar services (both within and beyond the relevant jurisdiction); and
  - (5) any other relevant factor.
- (e) The AER must, before 1 March 2008 or the date that is one month after the commencement date (whichever is the later), *publish* a statement indicating its likely approach to the control mechanisms for *alternative control services*. In preparing the statement, the AER may carry out such consultation as the AER thinks appropriate and may take into consideration any consultation carried out before the commencement date.

### 6.2.6 Basis of control mechanisms for direct control services

- (a) For *standard control services*, the control mechanism must be of the prospective CPI minus X form, or some incentive-based variant of the prospective CPI minus X form, in accordance with Part C.
- (b) For *alternative control services*, the control mechanism must have a basis stated in the distribution determination.
- (c) The control mechanism for *alternative control services* may (but need not) utilise elements of Part C (with or without modification).

*Examples:*

*The control mechanism might be based on the building block approach.*

*The distribution determination might provide for the application of clause 6.6.1 to pass through events with necessary adaptations and specified modifications.*

## 6.2.7 EnergyAustralia negotiated distribution services

*Negotiated distribution services* provided by EnergyAustralia are regulated in accordance with Part D.

### 6.2.7A Negotiable components of direct control services (NSW and ACT)

Despite anything in this Division 2, the control mechanism for *direct control services* may include elements referred to as negotiable components of *direct control services*, as provided in Part DA.

## 6.2.8 Guidelines

- (a) The *AER* may *publish* guidelines as to:
  - (1) \*\*\*\*\*
  - (2) the control mechanisms for *direct control services*; and
  - (3) the calculation of stand-alone, avoidable and long-run marginal costs; and
  - (4) the *AER's* likely approach to determining materiality in the context of possible *pass through events*; and
  - (4A) the transition from pre-tax to post-tax revenue regulation; and
  - (5) other matters relevant to this Chapter.
- (b) The guidelines may relate to a specified *Distribution Network Service Provider* or *Distribution Network Service Providers* of a specified class.
- (c) The guidelines are not mandatory (and hence do not bind the *AER* or anyone else) but, if the *AER* makes a distribution determination that is not in accordance with a relevant guideline, the *AER* must state, in its reasons for the distribution determination, the reasons for departing from the guideline.
- (d) If the guidelines indicate that there may be a change of regulatory approach in future distribution determinations, the guidelines should also (if practicable) indicate how transitional issues are to be dealt with.
- (e) \*\*\*\*\*
- (f) In making or amending a guideline, the *AER* may carry out such consultation as the *AER* thinks appropriate and may take into consideration any consultation carried out before the commencement date.

## Part C Building Block Determinations for standard control services

### 6.3 Building block determinations

#### 6.3.1 Introduction

- (a) A *building block determination* is a component of a distribution determination.
- (b) The procedure for making a *building block determination* is contained in Part E of this Chapter and involves the submission of a *building block proposal* to the AER by the *Distribution Network Service Provider*.
- (c) The *building block proposal*:
  - (1) must be prepared in accordance with the *post-tax revenue model*, other relevant requirements of this Part, and Schedule 6.1; and
  - (2) must comply with the requirements of, and must contain or be accompanied by the information required by, any relevant *regulatory information instrument*.

#### 6.3.2 Contents of building block determination

- (a) A *building block determination* for a *Distribution Network Service Provider* is to specify, for a *regulatory control period*, the following matters:
  - (1) the *Distribution Network Service Provider's* annual revenue requirement for each regulatory year of the regulatory control period;
  - (2) appropriate methods for the indexation of the regulatory asset base;
  - (3) how any applicable *efficiency benefit sharing scheme*, *service target performance incentive scheme*, or *demand management incentive scheme* are to apply to the *Distribution Network Service Provider*;
  - (4) the commencement and length of the *regulatory control period*;
  - (5) any other amounts, values or inputs on which the *building block determination* is based (differentiating between those contained in, or inferred from, the service provider's *building block proposal* and those based on the AER's own estimates or assumptions).
- (b) \*\*\*\*\*

## **6.4 Post-tax revenue model**

### **6.4.1 Preparation, publication and amendment of post-tax revenue model**

- (a) The *AER* must prepare and *publish* a *post-tax revenue model*.
- (b) \*\*\*\*\*
- (c) \*\*\*\*\*
- (d) The *AER* must *publish* the first *post-tax revenue model* before 1 February 2008 or the date that is one month after the commencement date (whichever is the later), and may carry out such consultation in connection with the preparation of the model as the *AER* thinks appropriate and may take into consideration any consultation carried out before the commencement date.
- (e) The *AER* may, from time to time and with the agreement of each affected *Distribution Network Service Provider*, amend or replace the *post-tax revenue model*.

### **6.4.2 Contents of post-tax revenue model**

- (a) The *post-tax revenue model* must set out the manner in which the *Distribution Network Service Provider's annual revenue requirement* for each *regulatory year* of a *regulatory control period* is to be calculated.
- (b) The contents of the *post-tax revenue model* must include (but are not limited to):
  - (1) a method that the *AER* determines is likely to result in the best estimates of expected inflation; and
  - (2) the timing assumptions and associated discount rates that are to apply in relation to the calculation of the building blocks referred to in clause 6.4.3; and
  - (3) the manner in which working capital is to be treated; and
  - (4) the manner in which the estimated cost of corporate income tax is to be calculated.

### **6.4.3 Building block approach**

- (a) Building blocks generally

*The annual revenue requirement* for a *Distribution Network Service Provider* for each *regulatory year* of a *regulatory control period* must be

determined using a building block approach, under which the building blocks are:

- (1) indexation of the regulatory asset base – see paragraph (b)(1); and
- (2) a return on capital for that year – see paragraph (b)(2); and
- (3) the depreciation for that year – see paragraph (b)(3); and
- (4) the estimated cost of corporate income tax of the provider for that year – see paragraph (b)(4); and
- (5) the revenue increments or decrements (if any) for that year arising from the application of the *service target performance incentive scheme* and the *demand management incentive scheme* – see paragraph (b)(5); and
- (6) the other revenue increments or decrements (if any) for that year arising from the application of a control mechanism in the previous *regulatory control period* – see paragraph (b)(6); and
- (7) the forecast operating expenditure for that year – see paragraph (b)(7); and
- (8) certain revenue increments or decrements for that year arising from the D-factor carry forward – see paragraph (b)(8).

(b) Details of the building blocks

For the purposes of paragraph (a):

- (1) for indexation of the regulatory asset base:
  - (i) the regulatory asset base is calculated in accordance with clause 6.5.1 and schedule 6.2; and
  - (ii) the building block comprises a negative adjustment equal to the amount referred to in clause S6.2.3(c)(4) for that year; and
- (2) the return on capital is calculated in accordance with clause 6.5.2; and
- (3) the depreciation is calculated in accordance with clause 6.5.5; and
- (4) the estimated cost of corporate income tax is determined in accordance with clause 6.5.3; and
- (5) the revenue increments or decrements referred to in paragraph (a)(5) are those that arise as a result of the operation of an applicable *service*

*target performance incentive scheme* or *demand management incentive scheme* as referred to in clauses 6.6.2 and 6.6.3; and

- (6) the other revenue increments or decrements referred to in paragraph (a)(6) are those that are to be carried forward to the current *regulatory control period* as a result of the application of a control mechanism in the previous *regulatory control period* and are apportioned to the relevant year under the distribution determination for the current *regulatory control period*; and
  - (7) the forecast operating expenditure for the year is the forecast operating expenditure as accepted or substituted by the *AER* in accordance with clause 6.5.6; and
  - (8) the revenue increments or decrements are those that arise as a result of the operation of the arrangements in clause 11 of the IPART's Final Determination No 2, 2004 (relating to NSW Electricity Distribution Pricing 2004/05 to 2008/09) for expenditure or foregone revenue in each of the last 2 *regulatory years* of the regulatory control period 2004-2009.
- (c) The arrangements referred to in paragraph (b)(8) have effect in relation to expenditure or foregone revenue in each of the last 2 *regulatory years* of the regulatory control period 2004-2009:
- (1) as if references to the IPART were references to the *AER* and references to the regulatory control period 2004-2009 were references to the regulatory control period 2009-2014; and
  - (2) with any other necessary modifications.

## **6.5 Matters relevant to the making of building block determinations**

### **6.5.1 Regulatory asset base**

#### **Nature of regulatory asset base**

- (a) The regulatory asset base for a *distribution system* owned, controlled or operated by a *Distribution Network Service Provider* is the value of those assets that are used by the provider to provide *standard control services*, but only to the extent that they are used to provide such services.

#### **Preparation, publication and amendment of model for rolling forward regulatory asset base**

- (b) The *AER* must develop and *publish* a model for the roll forward of the regulatory asset base for *distribution systems*, referred to as the *roll forward model*.

- (c) The *AER* may, from time to time and with the agreement of each affected *Distribution Network Service Provider*, amend or replace the *roll forward model*.
- (d) The *AER* must develop and *publish* the first *roll forward model*, before 1 February 2008 or the date that is one month after the commencement date (whichever is the later), and may carry out such consultation in connection with the preparation of the model as the *AER* thinks appropriate and may take into consideration any consultation carried out before the commencement date. There must be such a model available at all times after that date.

### **Contents of roll forward model**

- (e) The *roll forward model* must set out the method for determining the roll forward of the regulatory asset base for *distribution systems*:
  - (1) from the immediately preceding *regulatory control period* to the beginning of the first year of the subsequent *regulatory control period*, so as to establish the value of the regulatory asset base as at the beginning of the first *regulatory year* of that subsequent *regulatory control period*; and
  - (2) from one *regulatory year* in a *regulatory control period* to a subsequent *regulatory year* in that same *regulatory control period*, so as to establish the value of the regulatory asset base as at the beginning of that subsequent *regulatory year*;

under which:

- (3) the roll forward of the regulatory asset base from the immediately preceding *regulatory control period* to the beginning of the first *regulatory year* of a subsequent *regulatory control period* entails the value of the first mentioned regulatory asset base being adjusted for actual inflation, consistently with the method used for the indexation of the control mechanism (or control mechanisms) for *standard control services* during the preceding *regulatory control period*.

### **Other provisions relating to regulatory asset base**

- (f) Other provisions relating to regulatory asset bases are set out in schedule 6.2.
- (g) For the purpose of establishing the value of the regulatory asset base (as referred to in paragraph (e)(1)) as at the beginning of the first *regulatory year* of the regulatory control period 2009-2014 for the ACT Distribution Network Service Provider, and despite clause S6.2.1(e), the *roll forward model* must apply the approach adopted by the ICRC in the distribution



determination for the regulatory control period 2004-2009, but taking into account any written representations by the ICRC to the ACT Distribution Network Service Provider before the commencement date.

- (h) For the purpose of establishing the value of the regulatory asset base (as referred to in paragraph (e)(1)) as at the beginning of the first *regulatory year* of the regulatory control period 2009-2014 for EnergyAustralia, the *roll forward model* in respect of transmission network support assets must be applied as if the *AER* were separately regulating EnergyAustralia's transmission system under the relevant provisions of Chapter 6A.

## 6.5.2 Return on capital

### Calculation of return on capital

- (a) The return on capital for each *regulatory year* must be calculated by applying a rate of return for the relevant *Distribution Network Service Provider* for that *regulatory control period* (calculated in accordance with this clause 6.5.2) to the value of the regulatory asset base for the relevant *distribution system* as at the beginning of that *regulatory year* (as established in accordance with clause 6.5.1 and schedule 6.2).

### Weighted average cost of capital

- (b) The rate of return for a *Distribution Network Service Provider* for a *regulatory control period* is the cost of capital as measured by the return required by investors in a commercial enterprise with a similar nature and degree of non-diversifiable risk as that faced by the *distribution* business of the provider and must be calculated as a nominal post-tax *weighted average cost of capital* ("WACC") in accordance with the following formula:

$$\text{WACC} = k_e \frac{E}{V} + k_d \frac{D}{V}$$

where:

$k_e$  is the return on equity (determined using the Capital Asset Pricing Model) and is calculated as:

$$r_f + \beta_e \times \text{MRP}$$

where:

$r_f$  is the nominal risk free rate for the *regulatory control period* determined in accordance with paragraph (c);

$\beta_e$  (the equity beta) is deemed to be 1.0; and

MRP (the market risk premium) is deemed to be 6.0%;

$k_d$  is the return on debt and is calculated as:

$r_f + \text{DRP}$

where:

DRP is the debt risk premium for the *regulatory control period* determined in accordance with paragraph (e);

$E/V$  is the value of equity as a proportion of the value of equity and debt, which is  $1 - D/V$ ; and

$D/V$  (the value of debt as a proportion of the value of equity and debt) is deemed to be 0.6.

#### Meaning of nominal risk free rate

(c) The nominal risk free rate for a *regulatory control period* is the rate determined for that *regulatory control period* by the AER on a moving average basis from the annualised yield on Commonwealth Government bonds with a maturity of 10 years using:

(1) the indicative mid rates published by the Reserve Bank of Australia; and

(2) a period of time which is either:

(i) a period ('the **agreed period**') proposed by the relevant *Distribution Network Service Provider*, and agreed by the AER (such agreement is not to be unreasonably withheld); or

(ii) a period specified by the AER, and notified to the provider within a reasonable time prior to the commencement of that period, if the period proposed by the provider is not agreed by the AER under subparagraph (i),

and, for the purposes of subparagraph (i):

(iii) the start date and end date for the agreed period may be kept confidential, but only until the expiration of the agreed period; and

(iv) the AER must notify the *Distribution Network Service Provider* whether or not it agrees with the proposed period within 30 *business days* of the date of submission of the *building block proposal*.

- (d) If there are no Commonwealth Government bonds with a maturity of 10 years on any day in the period referred to in paragraph (c)(2), the *AER* must determine the nominal risk free rate for the *regulatory control period* by interpolating on a straight line basis from the two Commonwealth Government bonds closest to the 10 year term and which also straddle the 10 year expiry date.

### Meaning of debt risk premium

- (e) The debt risk premium for a *regulatory control period* is the premium determined for that *regulatory control period* by the *AER* as the margin between the 10 year Commonwealth annualised bond rate and the observed annualised Australian benchmark corporate bond rate for corporate bonds which have a maturity of 10 years and a credit rating of BBB+ from Standard and Poors.

## 6.5.3 Estimated cost of corporate income tax

The estimated cost of corporate income tax of a *Distribution Network Service Provider* for each *regulatory year* ( $ETC_t$ ) must be calculated in accordance with the following formula:

$$ETC_t = (ETI_t \times r_t) (1 - \gamma)$$

where:

$ETI_t$  is an estimate of the taxable income for that *regulatory year* that would be earned by a benchmark efficient entity as a result of the provision of *standard control services* if such an entity, rather than the *Distribution Network Service Provider*, operated the business of the *Distribution Network Service Provider*, such estimate being determined in accordance with the *post-tax revenue model*;

$r_t$  is the expected statutory income tax rate for that *regulatory year* as determined by the *AER*; and

$\gamma$  (the assumed utilisation of imputation credits) is deemed to be 0.5.

For these purposes:

- (1) the cost of debt must be based on that of a benchmark efficient *Distribution Network Service Provider*; and
- (2) the estimate must take into account the estimated depreciation for that *regulatory year* for *tax* purposes, for a benchmark efficient *Distribution Network Service Provider*, of assets where the value of those assets is included in the regulatory asset base for the relevant *distribution system* for that *regulatory year*.

**6.5.4**      **\*\*\*\*\***

**6.5.5**      **Depreciation**

- (a) The depreciation for each *regulatory year*:
  - (1) must be calculated on the value of the assets as included in the regulatory asset base, as at the beginning of that *regulatory year*, for the relevant *distribution system*; and
  - (2) must be calculated:
    - (i) providing such depreciation schedules conform with the requirements set out in paragraph (b), using the depreciation schedules for each asset or category of assets that are nominated in the relevant *Distribution Network Service Provider's building block proposal*; or
    - (ii) to the extent the depreciation schedules nominated in the provider's *building block proposal* do not so conform, using the depreciation schedules determined for that purpose by the *AER*.
- (b) The depreciation schedules referred to in paragraph (a) must conform to the following requirements:
  - (1) the schedules must depreciate using a profile that reflects the nature of the assets or category of assets over the economic life of that asset or category of assets;
  - (2) the sum of the real value of the depreciation that is attributable to any asset or category of assets over the economic life of that asset or category of assets (such real value being calculated as at the time the value of that asset or category of assets was first included in the regulatory asset base for the relevant *distribution system*) must be equivalent to the value at which that asset or category of assets was first included in the regulatory asset base for the relevant *distribution system*;
  - (3) the economic life of the relevant assets and the depreciation methods and rates underpinning the calculation of depreciation for a given *regulatory control period* must be consistent with those determined for the same assets on a prospective basis in the distribution determination for that period.

**6.5.6**      **Forecast operating expenditure**

- (a) A *building block proposal* must include the total forecast operating expenditure for the relevant *regulatory control period* which the

*Distribution Network Service Provider* considers is required in order to achieve each of the following (the *operating expenditure objectives*):

- (1) meet or manage the expected demand for *standard control services* over that period;
  - (2) comply with all applicable *regulatory obligations or requirements* associated with the provision of *standard control services*;
  - (3) maintain the quality, reliability and security of supply of *standard control services*;
  - (4) maintain the reliability, safety and security of the *distribution system* through the supply of *standard control services*.
- (b) The forecast of required operating expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal* must:
- (1) comply with the requirements of any relevant *regulatory information instrument*; and
  - (2) be for expenditure that is properly allocated to *standard control services* in accordance with the principles and policies set out in the Cost Allocation Method for the *Distribution Network Service Provider*; and
  - (3) include both:
    - (i) the total of the forecast operating expenditure for the relevant *regulatory control period*; and
    - (ii) the forecast of the operating expenditure for each *regulatory year* of the relevant *regulatory control period*.
- (c) The *AER* must accept the forecast of required operating expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal* if the *AER* is satisfied that the total of the forecast operating expenditure for the *regulatory control period* reasonably reflects:
- (1) the efficient costs of achieving the *operating expenditure objectives*; and
  - (2) the costs that a prudent operator in the circumstances of the relevant *Distribution Network Service Provider* would require to achieve the *operating expenditure objectives*; and
  - (3) a realistic expectation of the demand forecast and cost inputs required to achieve the *operating expenditure objectives*.

(the *operating expenditure criteria*).

- (d) If the *AER* is not satisfied as referred to in paragraph (c), it must not accept the forecast of required operating expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal*.
- (e) In deciding whether or not the *AER* is satisfied as referred to in paragraph (c), the *AER* must have regard to the following (the *operating expenditure factors*):
  - (1) the information included in or accompanying the *building block proposal*;
  - (2) submissions received in the course of consulting on the *building block proposal*;
  - (3) analysis undertaken by or for the *AER* and *published* before the distribution determination is made in its final form;
  - (4) benchmark operating expenditure that would be incurred by an efficient *Distribution Network Service Provider* over the *regulatory control period*;
  - (5) the actual and expected operating expenditure of the *Distribution Network Service Provider* during any preceding *regulatory control periods*;
  - (6) the relative prices of operating and capital inputs;
  - (7) the substitution possibilities between operating and capital expenditure;
  - (8) whether the total labour costs included in the capital and operating expenditure forecasts for the *regulatory control period* are consistent with the incentives provided by the applicable *service target performance incentive scheme* in respect of the *regulatory control period*;
  - (9) the extent the forecast of required operating expenditure of the *Distribution Network Service Provider* is referable to arrangements with a person other than the provider that, in the opinion of the *AER*, do not reflect arm's length terms;
  - (10) the extent the *Distribution Network Service Provider* has considered, and made provision for, efficient non-network alternatives.

### 6.5.7 Forecast capital expenditure

- (a) A *building block proposal* must include the total forecast capital expenditure for the relevant *regulatory control period* which the *Distribution Network Service Provider* considers is required in order to achieve each of the following (the *capital expenditure objectives*):
- (1) meet or manage the expected demand for *standard control services* over that period;
  - (2) comply with all applicable *regulatory obligations or requirements* associated with the provision of *standard control services*;
  - (3) maintain the quality, reliability and security of supply of *standard control services*;
  - (4) maintain the reliability, safety and security of the *distribution system* through the supply of *standard control services*.
- (b) The forecast of required capital expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal* must:
- (1) comply with the requirements of any relevant *regulatory information instrument*; and
  - (2) be for expenditure that is properly allocated to *standard control services* in accordance with the principles and policies set out in the Cost Allocation Method for the *Distribution Network Service Provider*; and
  - (3) include both:
    - (i) the total of the forecast capital expenditure for the relevant *regulatory control period*; and
    - (ii) the forecast of the capital expenditure for each *regulatory year* of the relevant *regulatory control period*; and
  - (4) identify any forecast capital expenditure that is for an option that has satisfied the *regulatory test*.
- (c) The *AER* must accept the forecast of required capital expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal* if the *AER* is satisfied that the total of the forecast capital expenditure for the *regulatory control period* reasonably reflects:
- (1) the efficient costs of achieving the *capital expenditure objectives*; and

- (2) the costs that a prudent operator in the circumstances of the relevant *Distribution Network Service Provider* would require to achieve the *capital expenditure objectives*; and
- (3) a realistic expectation of the demand forecast and cost inputs required to achieve the *capital expenditure objectives*.

(the *capital expenditure criteria*)

- (d) If the *AER* is not satisfied as referred to in paragraph (c), it must not accept the forecast of required capital expenditure of a *Distribution Network Service Provider*.
- (e) In deciding whether or not the *AER* is satisfied as referred to in paragraph (c), the *AER* must have regard to the following ('the *capital expenditure factors*'):
  - (1) the information included in or accompanying the *building block proposal*;
  - (2) submissions received in the course of consulting on the *building block proposal*;
  - (3) analysis undertaken by or for the *AER* and *published* before the distribution determination is made in its final form;
  - (4) benchmark capital expenditure that would be incurred by an efficient *Distribution Network Service Provider* over the *regulatory control period*;
  - (5) the actual and expected capital expenditure of the *Distribution Network Service Provider* during any preceding *regulatory control periods*;
  - (6) the relative prices of operating and capital inputs;
  - (7) the substitution possibilities between operating and capital expenditure;
  - (8) whether the total labour costs included in the capital and operating expenditure forecasts for the *regulatory control period* are consistent with the incentives provided by the applicable *service target performance incentive scheme* in respect of the *regulatory control period*;
  - (9) the extent the forecast of required capital expenditure of the *Distribution Network Service Provider* is referable to arrangements with a person other than the provider that, in the opinion of the *AER*, do not reflect arm's length terms;



- (10) the extent the *Distribution Network Service Provider* has considered, and made provision for, efficient non-network alternatives.

### 6.5.8 Efficiency benefit sharing scheme

- (a) The *AER* may develop and *publish* a scheme or schemes (*efficiency benefit sharing scheme*) that provide for a fair sharing between NSW and ACT *Distribution Network Service Providers* and *Distribution Network Users* of:
  - (1) the efficiency gains derived from the operating expenditure of *Distribution Network Service Providers* for a *regulatory control period* being less than; and
  - (2) the efficiency losses derived from the operating expenditure of *Distribution Network Service Providers* for a *regulatory control period* being more than,  
  
the forecast operating expenditure accepted or substituted by the *AER* for that *regulatory control period*.
- (b) An *efficiency benefit sharing scheme* may (but is not required to) be developed to cover efficiency gains and losses related to capital expenditure or *distribution losses*.
- (c) In developing and implementing an *efficiency benefit sharing scheme*, the *AER* must have regard to:
  - (1) the need to ensure that benefits to consumers likely to result from the scheme are sufficient to warrant any reward or penalty under the scheme for *Distribution Network Service Providers*; and
  - (2) the need to provide *Distribution Network Service Providers* with a continuous incentive, so far as is consistent with economic efficiency, to reduce operating expenditure and, if the scheme extends to capital expenditure, capital expenditure; and
  - (3) the desirability of both rewarding *Distribution Network Service Providers* for efficiency gains and penalising *Distribution Network Service Providers* for efficiency losses; and
  - (4) any incentives that *Distribution Network Service Providers* may have to capitalise expenditure; and
  - (5) the possible effects of the scheme on incentives for the implementation of non-network alternatives.
- (d) The *AER* may, from time to time and with the agreement of each affected *Distribution Network Service Provider*, amend or replace an *efficiency benefit sharing scheme*.

- (e) The *AER* must *publish* a written statement, when it *publishes* its first *efficiency benefit sharing scheme* (if any), setting out how it proposes the *efficiency benefit sharing scheme* will operate for the next distribution determination. The statement may be included in the first *efficiency benefit sharing scheme* or may be *published* separately.
- (f) However, despite *publishing* an *efficiency benefit sharing scheme*, the *AER* need not apply the scheme to one or more *Distribution Network Service Providers* in the relevant distribution determination or determinations.
- (g) The *AER* may carry out such consultation in connection with the preparation of an *efficiency benefit sharing scheme* as the *AER* thinks appropriate and may take into consideration any consultation carried out before the commencement date.
- (h) If an *efficiency benefit sharing scheme* applicable to a NSW or ACT Distribution Network Service Provider is not *published* before 1 March 2008 or the date that is one month after the commencement date (whichever is the later), no *efficiency benefit sharing scheme* may be applied to the *Distribution Network Service Provider* in its distribution determination for the regulatory control period 2009-2014.
- (i) The *AER* may monitor and collect information from any or all of the NSW and ACT Distribution Network Service Providers on matters relevant to be included in an *efficiency benefit sharing scheme* for the purpose of developing, amending or applying an *efficiency benefit sharing scheme* for the regulatory control period commencing on 1 July 2014.

### 6.5.9 The X factor

- (a) A *building block determination* is to include the X factor for each control mechanism for each *regulatory year* of the *regulatory control period*.
- (b) The X factor:
  - (1) must be set by the *AER* with regard to the *Distribution Network Service Provider's* total *revenue requirement* for the *regulatory control period*; and
  - (2) must be such as to minimise, as far as reasonably possible, variance between expected revenue for the last *regulatory year* of the *regulatory control period* and the *annual revenue requirement* for that last *regulatory year*; and
  - (3) must conform with whichever of the following requirements is applicable:

- (i) if the control mechanism relates generally to *standard control services* – the X factor must be designed to equalise (in terms of net present value) the revenue to be earned by the *Distribution Network Service Provider* from the provision of *standard control services* over the *regulatory control period* with the provider's *total revenue requirement* for the *regulatory control period*;
  - (ii) if there are separate control mechanisms for different *standard control services* – the X factor for each control mechanism must be designed to equalise (in terms of net present value) the revenue to be earned by the *Distribution Network Service Provider* from the provision of *standard control services* to which the control mechanism relates over the *regulatory control period* with the portion of the provider's *total revenue requirement* for the *regulatory control period* attributable to those services.
- (c) There may be different X factors:
- (1) for different regulatory years of the regulatory control period; and
  - (2) if there are 2 or more control mechanisms – for each control mechanism.

## **6.6 Adjustments after making of building block determination**

### **6.6.1 Cost pass through**

- (a) If a *positive change event* occurs, a *Distribution Network Service Provider* may seek the approval of the *AER* to pass through to *Distribution Network Users* a *positive pass through amount*.
- (b) If a *negative change event* occurs, the *AER* may require the *Distribution Network Service Provider* to pass through to *Distribution Network Users* a *negative pass through amount* as determined by the *AER* under paragraph (g).

#### **Positive pass through**

- (c) To seek the approval of the *AER* to pass through a *positive pass through amount*, a *Distribution Network Service Provider* must submit to the *AER*, within 90 *business days* of the relevant *positive change event* occurring, a written statement which specifies:
  - (1) the details of the *positive change event*; and
  - (2) the date on which the *positive change event* occurred; and

- (3) the *eligible pass through amount* in respect of that *positive change event*; and
  - (4) the *positive pass through amount* the provider proposes in relation to the *positive change event*; and
  - (5) the amount of the *positive pass through amount* that the provider proposes should be passed through to *Distribution Network Users* in each *regulatory year* during the *regulatory control period*; and
  - (6) evidence:
    - (i) of the actual and likely increase in costs referred to in subparagraph (3); and
    - (ii) that such costs occur solely as a consequence of the *positive change event*; and
  - (7) such other information as may be required under any relevant *regulatory information instrument*.
- (d) If the *AER* determines that a *positive change event* has occurred in respect of a statement under paragraph (c), the *AER* must determine:
- (1) the *approved pass through amount*; and
  - (2) the amount of that *approved pass through amount* that should be passed through to *Distribution Network Users* in each *regulatory year* during the *regulatory control period*,
- taking into account the matters referred to in paragraph (j).
- (e) If the *AER* does not make the determinations referred to in paragraph (d) within 60 *business days* from the date it receives the *Distribution Network Service Provider's* statement and accompanying evidence under paragraph (c), then, on the expiry of that period, the *AER* is taken to have determined that:
- (1) the *positive pass through amount* as proposed in the provider's statement under paragraph (c) is the *approved pass through amount* in respect of that *positive change event*; and
  - (2) the amount of that *positive pass through amount* that the provider proposes in its statement under paragraph (c) should be passed through to *Distribution Network Users* in each *regulatory year* during the *regulatory control period*, is the amount that should be so passed through in each such *regulatory year*.

### **Negative pass through**

- (f) A *Distribution Network Service Provider* must submit to the *AER*, within 90 *business days* of becoming aware of the occurrence of a *negative change event* for the provider, a written statement which specifies:
- (1) the details of the *negative change event* concerned; and
  - (2) the date the *negative change event* occurred; and
  - (3) the costs in the provision of *standard control services* that the provider has saved and is likely to save until the end of the *regulatory control period* as a result of the *negative change event*; and
  - (4) the aggregate amount of those saved costs that the provider proposes should be passed through to *Distribution Network Users*; and
  - (5) the amount of the costs referred to in subparagraph (4) the provider proposes should be passed through to *Distribution Network Users* in each *regulatory year* during the *regulatory control period*; and
  - (6) such other information as may be required under any relevant *regulatory information instrument*.
- (g) If a *negative change event* occurs (whether or not the occurrence of that *negative change event* is notified by the provider to the *AER* under paragraph (f)) and the *AER* determines to impose a requirement on the provider in relation to that *negative change event* as described in paragraph (b), the *AER* must determine:
- (1) the *required pass through amount*; and
  - (2) taking into account the matters referred to in paragraph (j):
    - (i) how much of that *required pass through amount* should be passed through to *Distribution Network Users* (the *negative pass through amount*); and
    - (ii) the amount of that *negative pass through amount* that should be passed through to *Distribution Network Users* in each *regulatory year* during the *regulatory control period*.
- (h) A *Distribution Network Service Provider* must provide the *AER* with such information as the *AER* requires for the purpose of making a determination under paragraph (g) within the time specified by the *AER* in a notice provided to the provider by the *AER* for that purpose.

### **Consultation**

- (i) Before making a determination under paragraph (d) or (g), the *AER* may consult with the relevant *Distribution Network Service Provider* and such

other persons as the *AER* considers appropriate, on any matters arising out of the relevant *pass through event* the *AER* considers appropriate.

### **Relevant factors**

- (j) In making a determination under paragraph (d) or (g) in respect of a *Distribution Network Service Provider*, the *AER* must take into account:
- (1) the matters and proposals set out in any statement given to the *AER* by the provider under paragraph (c) or (f); and
  - (2) in the case of a *positive change event*, the increase in costs in the provision of *standard control services* that the provider has incurred and is likely to incur until the end of the *regulatory control period* as a result of the *positive change event*; and
  - (3) in the case of a *positive change event*, the efficiency of the provider's decisions and actions in relation to the risk of the *positive change event*, including whether the provider has failed to take any action that could reasonably be taken to reduce the magnitude of the *eligible pass through amount* in respect of that *positive change event* and whether the provider has taken or omitted to take any action where such action or omission has increased the magnitude of the amount in respect of that *positive change event*; and
  - (4) the time cost of money based on the *weighted average cost of capital* for the provider for the relevant *regulatory control period*; and
  - (5) the need to ensure that the provider only recovers any actual or likely increment in costs under this paragraph (j) to the extent that such increment is solely as a consequence of a *pass through event*; and
  - (6) in the case of a *tax change event*, any change in the way another *tax* is calculated, or the removal or imposition of another *tax*, which, in the *AER*'s opinion, is complementary to the *tax change event* concerned; and
  - (7) whether the costs of the *pass through event* have already been factored into the calculation of the provider's *annual revenue requirement*; and
  - (8) any other factors the *AER* considers relevant.

### **Extension of time limits**

- (k) The *AER* must, by written notice to a *Distribution Network Service Provider*, extend a time limit fixed in clause 6.6.1(c) or clause 6.6.1(f) if the *AER* is satisfied that the difficulty of assessing or quantifying the effect of the relevant *pass through event* justifies the extension.

### **Contributions to Climate Change Fund (NSW)**

- (l) Neither a requirement by an order under the Energy and Utilities Administration Act 1987 of New South Wales to make a payment to the Climate Change Fund established under that Act, nor the making of a payment to that Fund, is a *pass through event* in relation to a NSW Distribution Network Service Provider, but the amount is recoverable in the following *regulatory year* under clause 6.18.2(b)(5A).

### **6.6.2 Service target performance incentive scheme**

- (a) The AER may develop and *publish* an incentive scheme or incentive schemes (*service target performance incentive scheme*) to provide incentives (which may include targets) for *Distribution Network Service Providers* to maintain and improve performance.
- (b) In developing and implementing a *service target performance incentive scheme*, the AER:
  - (1) must consult with the authorities responsible for the administration of relevant *jurisdictional electricity legislation*; and
  - (2) must ensure that service standards and service targets (including guaranteed service levels) set by the scheme do not put at risk the *Distribution Network Service Provider's* ability to comply with relevant service standards and service targets (including guaranteed service levels) as specified in *jurisdictional electricity legislation*; and

*Note:*

*A service target performance incentive scheme operates concurrently with any average or minimum service standards and guaranteed service level schemes that apply to the Distribution Network Service Provider under jurisdictional electricity legislation.*

- (3) must take into account:
  - (i) the need to ensure that benefits to consumers likely to result from the scheme are sufficient to warrant any reward or penalty under the scheme for *Distribution Network Service Providers*; and
  - (ii) any *regulatory obligation or requirement* to which the *Distribution Network Service Provider* is subject; and
  - (iii) the past performance of the *distribution network*; and

- (iv) any other incentives available to the *Distribution Network Service Provider* under the *Rules* or a relevant distribution determination; and
  - (v) the need to ensure that the incentives are sufficient to offset any financial incentives the service provider may have to reduce costs at the expense of service levels; and
  - (vi) the willingness of the customer or end user to pay for improved performance in the delivery of services; and
  - (vii) the possible effects of the scheme on incentives for the implementation of non-network alternatives.
- (c) The *AER* may, from time to time and with the agreement of each affected *Distribution Network Service Provider*, amend or replace any scheme that is developed and *published* under this clause.
- (d) The *AER* must *publish* a written statement, when it *publishes* its first *service target performance incentive scheme* (if any), setting out how it proposes the *service target performance incentive scheme* will operate for the next distribution determination. The statement may be included in the first *service target performance incentive scheme* or may be *published* separately.
- (e) However, despite *publishing* a *service target performance incentive scheme*, the *AER* need not apply the scheme to one or more *Distribution Network Service Providers* in the relevant distribution determination or determinations.
- (f) The *AER* may carry out such consultation in connection with the preparation of a *service target performance incentive scheme* as the *AER* thinks appropriate and may take into consideration any consultation carried out before the commencement date.
- (g) If a *service target performance incentive scheme* applicable to a NSW or ACT *Distribution Network Service Provider* is not *published* before 1 March 2008 or the date that is one month after the commencement date (whichever is the later), no *service target performance incentive scheme* may be applied to the *Distribution Network Service Provider* in its distribution determination for the regulatory control period 2009-2014.
- (h) The *AER* must monitor and collect information from any or all of the NSW and ACT *Distribution Network Service Providers* on matters relevant to be included in a *service target performance incentive scheme* for the purpose of developing, amending or applying a *service target performance incentive scheme* for the *regulatory control period* commencing on 1 July 2014.



- (i) The *AER* may, in connection with the application of a *service target performance incentive scheme* applying to EnergyAustralia in respect of EnergyAustralia prescribed (transmission) standard control services provided in the regulatory control period 2009-2014, adopt relevant provisions of the *service target performance incentive scheme* prepared and published by the *AER* under Chapter 6A so far as it is applicable to the service.
- (j) A *service target performance incentive scheme* applying to EnergyAustralia in respect of EnergyAustralia prescribed (transmission) standard control services should ensure that the maximum revenue increment or decrement as a result of the operation of the *service target performance incentive scheme* will fall within a range that is between 1% and 5% of the maximum allowed revenue for the relevant *regulatory year*.
- (k) A *service target performance incentive scheme* applying to the ACT Distribution Network Service Provider must not, without the agreement of the provider, confer financial rewards or impose financial penalties on the provider for the regulatory control period 2009-2014, but this paragraph does not affect the operation of paragraph (h).

*Note:*

*A Distribution Network Service Provider is not precluded from entering into a contract with a third party (such as a network support service provider) under which the benefits of a service target performance incentive scheme are passed on to the third party, or the third party is required to indemnify the provider for penalties to which the provider becomes liable under the scheme.*

### 6.6.3 Demand management incentive scheme

- (a) The *AER* may develop and *publish* an incentive scheme or schemes (*demand management incentive scheme*) to provide incentives for *Distribution Network Service Providers* to implement efficient non-network alternatives or to manage the expected demand for *standard control services* in some other way.
- (b) In developing and implementing a *demand management incentive scheme*, the *AER* must have regard to:
  - (1) the need to ensure that benefits to consumers likely to result from the scheme are sufficient to warrant any reward or penalty under the scheme for *Distribution Network Service Providers*; and
  - (2) the effect of a particular control mechanism (i.e. price – as distinct from revenue – regulation) on a *Distribution Network Service*

- Provider's* incentives to adopt or implement efficient non-network alternatives; and
- (3) the extent the *Distribution Network Service Provider* is able to offer efficient pricing structures; and
  - (4) the possible interaction between a *demand management incentive scheme* and other incentive schemes; and
  - (5) the willingness of the customer or end user to pay for increases in costs resulting from implementation of the scheme.
- (c) The *AER* may, from time to time and with the agreement of each affected *Distribution Network Service Provider*, amend or replace any scheme that is developed and *published* under this clause.
  - (d) Nothing in this clause limits the content of an *efficiency benefit sharing scheme*.
  - (e) The *AER* must *publish* a written statement, when it *publishes* its first *demand management incentive scheme* (if any), setting out how it proposes the *demand management incentive scheme* will operate for the next distribution determination. The statement may be included in the first *demand management incentive scheme* or may be *published* separately.
  - (f) The *AER* may carry out such consultation in connection with the preparation of the *demand management incentive scheme* as the *AER* thinks appropriate and may take into consideration any consultation carried out before the commencement date.
  - (g) If a *demand management incentive scheme* applicable to a NSW or ACT Distribution Network Service Provider is not *published* by the *AER* before 1 March 2008 or the date that is one month after the commencement date (whichever is the later), no *demand management incentive scheme* may be applied to the *Distribution Network Service Provider* in its distribution determination for the regulatory control period 2009-2014.
  - (h) Nothing in this clause affects the application of the D-factor carry forward referred to in clause 6.4.3(a)(8) and clause 6.4.3(b)(8).

## Part D EnergyAustralia negotiated distribution services

### 6.7 Negotiated distribution services

This rule applies only to EnergyAustralia negotiated distribution services.

### 6.7.1 Principles relating to access to negotiated distribution services

The following principles constitute the *Negotiated Distribution Service Principles*:

- (1) the price for a *negotiated distribution service* should be based on the costs incurred in providing that service, determined in accordance with the principles and policies set out in the Cost Allocation Method for the relevant *Distribution Network Service Provider*;
- (2) subject to subparagraphs (3) and (4), the price for a *negotiated distribution service* should be at least equal to the cost that would be avoided by not providing the service but no more than the cost of providing it on a stand alone basis;
- (3) if the *negotiated distribution service* is the provision of a *shared distribution service* that:
  - (i) exceeds the *network* performance requirements (if any) which that *shared distribution service* is required to meet under any *jurisdictional electricity legislation*; or
  - (ii) exceeds the *network* performance requirements set out in schedules 5.1a and 5.1,

then the differential between the price for that service and the price for the *shared distribution service* which meets (but does not exceed) the *network* performance requirements under any *jurisdictional electricity legislation* or as set out in schedules 5.1a and 5.1 (as the case may be) should reflect the increase in the *Distribution Network Service Provider's* incremental cost of providing that service;

- (4) if the *negotiated distribution service* is the provision of a *shared distribution service* that does not meet (and does not exceed) the *network* performance requirements set out in schedules 5.1a and 5.1, the differential between the price for that service and the price for the *shared distribution service* which meets (but does not exceed) the *network* performance requirements set out in schedules 5.1a and 5.1 should reflect the cost the *Distribution Network Service Provider* would avoid by not providing that service;
- (5) the price for a *negotiated distribution service* must be the same for all *Distribution Network Users* unless there is a material difference in the costs of providing the *negotiated distribution service* to different *Distribution Network Users* or classes of *Distribution Network Users*;
- (6) the price for a *negotiated distribution service* should be subject to adjustment over time to the extent that the assets used to provide that service are subsequently used to provide services to another person, in

- which case the adjustment should reflect the extent to which the costs of that asset are being recovered through charges to that other person;
- (7) the price for a *negotiated distribution service* should be such as to enable the *Distribution Network Service Provider* to recover the efficient costs of complying with all *regulatory obligations or requirements* associated with the provision of the *negotiated distribution service*;
  - (8) any *access charges* should be based on the costs reasonably incurred by the *Distribution Network Service Provider* in providing *distribution network user access* and, in the case of compensation referred to in rule 5.4A(h) to (j), on the revenue that is likely to be foregone and the costs that are likely to be incurred by a person referred to in those provisions where an event referred to in those provisions occurs;
  - (9) the *terms and conditions of access* for a *negotiated distribution service* should be fair and reasonable and consistent with the safe and reliable operation of the *power system* in accordance with the *Rules* (for these purposes, the price for a *negotiated distribution service* is to be treated as being fair and reasonable if it complies with principles (1) to (7) of this clause;
  - (10) the *terms and conditions of access* for a *negotiated distribution service* (including, in particular, any exclusions and limitations of liability and indemnities) must not be unreasonably onerous taking into account the allocation of risk between the *Distribution Network Service Provider* and the other party, the price for the *negotiated distribution service* and the costs to the *Distribution Network Service Provider* of providing the *negotiated distribution service*;
  - (11) the *terms and conditions of access* for a *negotiated distribution service* should take into account the need for the service to be provided in a manner that does not adversely affect the safe and reliable operation of the *power system* in accordance with the *Rules*.

### **6.7.2 Determination of terms and conditions of access for negotiated distribution services**

- (a) A *Distribution Network Service Provider* must comply with:

- (1) the provider's *negotiating framework*; and
- (2) the provider's *Negotiated Distribution Service Criteria*,

when the provider is negotiating the terms and conditions of access to *negotiated distribution services*.

- (b) The *Distribution Network Service Provider* must also comply with any other applicable requirements of the *Rules*, including the requirements of:
  - (1) rules 5.3 and 5.4A, when negotiating for the provision of *connection services* and the associated *connection service* charges; and
  - (2) rule 5.4A when negotiating the *use of system services charges* and *access charges* to be paid to or by a *Distribution Network User*.

### 6.7.3 Negotiating framework determination

The determination specifying requirements relating to the *negotiating framework* forming part of a distribution determination for a *Distribution Network Service Provider* is to set out requirements that are to be complied with in respect of the preparation, replacement, application or operation of its *negotiating framework*.

### 6.7.4 Negotiated Distribution Service Criteria determination

- (a) The determination by the *AER* specifying the *Negotiated Distribution Service Criteria* forming part of a distribution determination for a *Distribution Network Service Provider* is to set out the criteria that are to be applied:
  - (1) by the provider in negotiating *terms and conditions of access* including:
    - (i) the prices that are to be charged for the provision of *negotiated distribution services* by the provider for the relevant *regulatory control period*; or
    - (ii) any *access charges* which are negotiated by the provider during that *regulatory control period*; and
  - (2) by the *AER* in resolving an access dispute about *terms and conditions of access* including:
    - (i) the price that is to be charged for the provision of a *negotiated distribution service* by the provider; or
    - (ii) any *access charges* that are to be paid to or by the provider.
- (b) The *Negotiated Distribution Service Criteria* must give effect to and be consistent with the *Negotiated Distribution Service Principles* set out in clause 6.7.1.

### 6.7.5 Preparation of and requirements for negotiating framework for negotiated distribution services

- (a) A *Distribution Network Service Provider* must prepare a document (the *negotiating framework*) setting out the procedure to be followed during negotiations between that provider and any person (the *Service Applicant* or applicant) who wishes to receive a *negotiated distribution service* from the provider, as to the *terms and conditions of access* for the provision of the service.
- (b) The *negotiating framework* for a *Distribution Network Service Provider* must comply with and be consistent with:
  - (1) the applicable requirements of the relevant distribution determination; and  

*Note:*

*See clause 6.7.3.*
  - (2) paragraph (c), which sets out the minimum requirements for a *negotiating framework*.
- (c) The *negotiating framework* for a *Distribution Network Service Provider* must specify:
  - (1) a requirement for the provider and a *Service Applicant* to negotiate in good faith the *terms and conditions of access* to a *negotiated distribution service*; and
  - (2) a requirement for the provider to provide all such commercial information a *Service Applicant* may reasonably require to enable that applicant to engage in effective negotiation with the provider for the provision of the *negotiated distribution service*, including the cost information described in subparagraph (3); and
  - (3) a requirement for the provider:
    - (i) to identify and inform a *Service Applicant* of the reasonable costs and/or the increase or decrease in costs (as appropriate) of providing the *negotiated distribution service*; and
    - (ii) to demonstrate to a *Service Applicant* that the charges for providing the *negotiated distribution service* reflect those costs and/or the cost increment or decrement (as appropriate); and
    - (iii) to have appropriate arrangements for assessment and review of the charges and the basis on which they are made; and

*Note:*

*If (for example) a charge, or an element of a charge, is based on a customer's actual or assumed maximum demand, the assessment and review arrangements should allow for a change to the basis of the charge so that it more closely reflects the customer's load profile where a reduction or increase in maximum demand has been demonstrated.*

- (4) a requirement for a *Service Applicant* to provide all commercial information the provider may reasonably require to enable the provider to engage in effective negotiation with that applicant for the provision of the *negotiated distribution service*; and
  - (5) a requirement that negotiations with a *Service Applicant* for the provision of the *negotiated distribution service* be commenced and finalised within specified periods and a requirement that each party to the negotiations must make reasonable endeavours to adhere to the specified time limits; and
  - (6) a process for dispute resolution which provides that all disputes as to the *terms and conditions of access* for the provision of *negotiated distribution services* are to be dealt with in accordance with the relevant provisions of the Law and the *Rules* for dispute resolution; and
  - (7) the arrangements for payment by a *Service Applicant* of the provider's reasonable direct expenses incurred in processing the application to provide the *negotiated distribution service*; and
  - (8) a requirement that the *Distribution Network Service Provider* determine the potential impact on other *Distribution Network Users* of the provision of the *negotiated distribution service*; and
  - (9) a requirement that the *Distribution Network Service Provider* must notify and consult with any affected *Distribution Network Users* and ensure that the provision of *negotiated distribution services* does not result in non-compliance with obligations in relation to other *Distribution Network Users* under the *Rules*; and
  - (10) a requirement that the *Distribution Network Service Provider* publish the results of negotiations on its website.
- (d) Notwithstanding the foregoing, the *negotiating framework* must not be inconsistent with any of the requirements of Rules 5.3 and 5.4A and other relevant provisions of this Chapter 6 and Chapter 6A and, in the event of any inconsistency, those requirements prevail.

- (e) Each *Distribution Network Service Provider* and *Service Applicant* who is negotiating for the provision of a *negotiated distribution service* by the provider must comply with the requirements of the *negotiating framework* in accordance with its terms.

### 6.7.6 Confidential information

- (a) Commercial information to be provided to a *Service Applicant* in accordance with clause 6.7.5(c)(2):
  - (1) does not include *confidential information* provided to the *Distribution Network Service Provider* by another person; and
  - (2) may be provided subject to a condition that the *Service Applicant* must not provide any part of that commercial information to any other person without the consent of the *Distribution Network Service Provider*.
- (b) Commercial information to be provided to a *Distribution Network Service Provider* in accordance with clause 6.7.5(c)(4):
  - (1) does not include *confidential information* provided to a *Service Applicant* by another person; and
  - (2) may be provided subject to a condition that the provider must not provide any part of that commercial information to any other person without the consent of the *Service Applicant*.

## Part DA Negotiable components of direct control services (NSW and ACT)

### 6.7A Negotiable components of direct control services

- (a) The *AER* may include in a *Distribution Network Service Provider's* distribution determination a decision that one or more components of the provider's *direct control services* are negotiable components.
- (b) A negotiable component may be a particular component of the *direct control service* or may relate to the terms or conditions on which a *direct control service* or a component of a *direct control service* is provided.
- (c) A reference in this rule 6.7A to the price for a negotiable component of a *direct control service* is a reference to the price for the *direct control service* if the negotiable component is successfully negotiated by the *Distribution Network Service Provider* and the *Service Applicant* concerned.



- (d) The following provisions of Rule 6.7A have effect if the AER decides that one or more components of *direct control services* provided by a *Distribution Network Service Provider* are negotiable components (as referred to in paragraph (a)).

### 6.7A.1 Principles relating to access to negotiable components

The following principles constitute the negotiable component principles:

- (1) the price for a negotiable component should be the price for that component in the *Distribution Network Service Provider's approved pricing proposal*, unless the terms and conditions sought for the component are so different from those used for the purposes of establishing the *approved pricing proposal* as to warrant determination of the price without regard to this subparagraph;
- (2) subject to subparagraph (1), the price for a negotiable component should be based on the costs incurred in providing that component, determined in accordance with the principles and policies set out in the Cost Allocation Method for the relevant *Distribution Network Service Provider*;
- (3) subject to subparagraphs (1), (4) and (5), the price for a negotiable component should be at least equal to the cost that would be avoided by not providing it but no more than the cost of providing it on a stand alone basis;
- (4) subject to subparagraph (1), if the *direct control service* of which the negotiable component is a component is the provision of a *shared distribution service* that:
  - (i) exceeds the *network* performance requirements (if any) which that *shared distribution service* is required to meet under any *jurisdictional electricity legislation*; or
  - (ii) exceeds the *network* performance requirements set out in schedules 5.1a and 5.1,

then the differential between the price for that *direct control service* and the price for the *shared distribution service* which meets (but does not exceed) the *network* performance requirements under any *jurisdictional electricity legislation* or as set out in schedules 5.1a and 5.1 (as the case may be) should reflect the increase in the *Distribution Network Service Provider's* incremental cost of providing that service;

- (5) subject to subparagraph (1), if the *direct control service* of which the negotiable component is a component is the provision of a *shared distribution service* that does not meet (and does not exceed) the

*network* performance requirements set out in schedules 5.1a and 5.1, then the differential between the price for that service and the price for the *shared distribution service* which meets (but does not exceed) the *network* performance requirements set out in schedules 5.1a and 5.1 should reflect the cost the *Distribution Network Service Provider* would avoid by not providing that service;

- (6) subject to subparagraph (1), the price for a negotiable component must be the same for all *Distribution Network Users* unless there is a material difference in the costs of providing the negotiable component to different *Distribution Network Users* or classes of *Distribution Network Users*;
- (7) subject to subparagraph (1), the price for a negotiable component should be subject to adjustment over time to the extent that the assets used to provide the *direct control service* are subsequently used to provide services to another person, in which case the adjustment should reflect the extent to which the costs of those assets are being recovered through charges to that other person;
- (8) subject to subparagraph (1), the price for a negotiable component should be such as to enable the *Distribution Network Service Provider* to recover the efficient costs of complying with all *regulatory obligations or requirements* associated with the provision of the negotiable component;
- (9) any *access charges* should be based on the costs reasonably incurred by the *Distribution Network Service Provider* in providing *distribution network user access* and, in the case of compensation referred to in clause 5.5(f)(4)(ii) and (iii), on the revenue that is likely to be foregone and the costs that are likely to be incurred by a person referred to in those provisions where an event referred to in those provisions occurs;
- (10) the *terms and conditions of access* for a negotiable component should be fair and reasonable and consistent with the safe and reliable operation of the *power system* in accordance with the *Rules* (for these purposes, the price for a negotiable component is to be treated as being fair and reasonable if it complies with principles (1) to (8) of this clause);
- (11) the *terms and conditions of access* for a negotiable component (including, in particular, any exclusions and limitations of liability and indemnities) must not be unreasonably onerous taking into account the allocation of risk between the *Distribution Network Service Provider* and the other party, the price for the negotiable component and the costs to the *Distribution Network Service Provider* of providing the negotiable component; and

- (12) the *terms and conditions of access* for a negotiable component should take into account the need for the *direct control service* to be provided in a manner that does not adversely affect the safe and reliable operation of the *power system* in accordance with the *Rules*.

### **6.7A.2 Determination of terms and conditions of access for negotiable components**

- (a) A *Distribution Network Service Provider* must comply with:
  - (1) the provider's *negotiating framework*; and
  - (2) the provider's negotiable component criteria,when the provider is negotiating the *terms and conditions of access* to negotiable components.
- (b) The *Distribution Network Service Provider* must also comply with any other applicable requirements of the *Rules*, including the requirements of:
  - (1) rules 5.3, 5.4A and 5.5, when negotiating for the provision of *connection services* and the associated *connection service* charges; and
  - (2) rules 5.4A and 5.5 when negotiating the *use of system services charges* and *access charges* to be paid to or by a *Distribution Network User*.

### **6.7A.3 Negotiating framework determination**

The determination specifying requirements relating to the *negotiating framework* forming part of a distribution determination for a *Distribution Network Service Provider* is to set out requirements that are to be complied with in respect of the preparation, replacement, application or operation of its *negotiating framework*.

### **6.7A.4 Negotiable component criteria determination**

- (a) The determination by the *AER* specifying the negotiable component criteria forming part of a distribution determination for a *Distribution Network Service Provider* is to set out the criteria that are to be applied:
  - (1) by the provider in negotiating *terms and conditions of access* including:
    - (i) the variations to the prices that are to be charged for the provision of the negotiable component of the *direct control service* concerned by the provider for the relevant *regulatory control period*; and

- (ii) any *access charges* which are negotiated by the provider during that *regulatory control period*; and
- (2) by the *AER* in resolving an access dispute, between the *Distribution Network Service Provider* and a person who wishes to be provided with a negotiable component, in relation to *terms and conditions of access* including:
  - (i) the variation of the prices that are to be charged for the provision of the negotiable component of the *direct control service* concerned by the provider; and
  - (ii) any *access charges* that are to be paid to or by the provider.
- (b) The negotiable component criteria must give effect to and be consistent with the principles set out in clause 6.7A.1.

#### **6.7A.5 Preparation of and requirements for negotiating framework**

- (a) A *Distribution Network Service Provider* must prepare a document (the *negotiating framework*) setting out the procedure to be followed during negotiations between that provider and any person (the *Service Applicant* or applicant) who wishes to be provided with a negotiable component from the provider, as to the *terms and conditions of access* for the provision of the component.
- (b) The *negotiating framework* for a *Distribution Network Service Provider* must comply with and be consistent with:
  - (1) the applicable requirements of a distribution determination applying to the provider; and
  - (2) paragraph (c), which sets out the minimum requirements for a *negotiating framework*.
- (c) The *negotiating framework* for a *Distribution Network Service Provider* must specify:
  - (1) a requirement for the provider and a *Service Applicant* to negotiate in good faith the *terms and conditions of access* to a negotiable component; and
  - (2) a requirement for the provider to provide all such commercial information a *Service Applicant* may reasonably require to enable that applicant to engage in effective negotiation with the provider for the provision of the negotiable component, including the cost information described in subparagraph (3); and
  - (3) a requirement for the provider:

- (i) to identify and inform a *Service Applicant* of the reasonable costs and/or the increase or decrease in costs (as appropriate) of providing the negotiable component; and
- (ii) to demonstrate to a *Service Applicant* that the charges for providing the negotiable component reflect those costs and/or the cost increment or decrement (as appropriate); and
- (iii) to have appropriate arrangements for assessment and review of the charges and the basis on which they are made;

*Note:*

*If (for example) a charge, or an element of a charge, is based on a customer's actual or assumed maximum demand, the assessment and review arrangements should allow for a change to the basis of the charge so that it more closely reflects the customer's load profile where a reduction or increase in maximum demand has been demonstrated.*

- (4) a requirement for a *Service Applicant* to provide all commercial information the provider may reasonably require to enable the provider to engage in effective negotiation with that applicant for the provision of the negotiable component; and
- (5) a requirement that negotiations with a *Service Applicant* for the provision of the negotiable component be commenced and finalised within specified periods and a requirement that each party to the negotiations must make reasonable endeavours to adhere to the specified time limits; and
- (6) a process for dispute resolution which provides that all disputes as to the *terms and conditions of access* for the provision of negotiable components are to be dealt with in accordance with the relevant provisions of the Law and the *Rules* for dispute resolution; and
- (7) the arrangements for payment by a *Service Applicant* of the provider's reasonable direct expenses incurred in processing the application to provide the negotiable component; and
- (8) a requirement that the *Distribution Network Service Provider* determine the potential impact on other *Distribution Network Users* of the provision of the negotiable component; and
- (9) a requirement that the *Distribution Network Service Provider* must notify and consult with any affected *Distribution Network Users* and ensure that the provision of negotiable components does not result in non-compliance with obligations in relation to other *Distribution Network Users* under the *Rules*; and

- (10) a requirement that the *Distribution Network Service Provider* publish the results of negotiations on its website.
- (d) Notwithstanding the foregoing, the *negotiating framework* must not be inconsistent with any of the requirements of Rules 5.3, 5.4A and 5.5 and other relevant provisions of this Chapter 6 and Chapter 6A and, in the event of any inconsistency, those requirements prevail.
- (e) Each *Distribution Network Service Provider* and *Service Applicant* who is negotiating for the provision of a negotiable component by the provider must comply with the requirements of the *negotiating framework* in accordance with its terms.
- (f) EnergyAustralia may prepare and submit a document that contains both the *negotiating framework* under this clause 6.7A.5 and the *negotiating framework* under clause 6.7.5, and both frameworks may be combined in a single framework.

#### **6.7A.6 Confidential information**

- (a) Commercial information to be provided to a *Service Applicant* in accordance with clause 6.7A.5(c)(2):
  - (1) does not include *confidential information* provided to the *Distribution Network Service Provider* by another person; and
  - (2) may be provided subject to a condition that the *Service Applicant* must not provide any part of that commercial information to any other person without the consent of the *Distribution Network Service Provider* .
- (b) Commercial information to be provided to a *Distribution Network Service Provider* in accordance with clause 6.7A.5(c)(4):
  - (1) does not include *confidential information* provided to a *Service Applicant* by another person; and
  - (2) may be provided subject to a condition that the provider must not provide any part of that commercial information to any other person without the consent of the *Service Applicant*.

## Part E Regulatory proposal

### 6.8 Regulatory proposal

#### 6.8.1 \*\*\*\*\*

#### 6.8.2 Submission of regulatory proposal

- (a) A *Distribution Network Service Provider* must, whenever required to do so under paragraph (b), submit a *regulatory proposal* to the *AER* for *distribution services* provided by means of, or in connection with, the provider's *distribution system*.
- (b) A *regulatory proposal* must be submitted on or before 2 June 2008.
- (c) A *regulatory proposal* must include (but need not be limited to) the following elements:
  - (1) \*\*\*\*\*
  - (2) for *direct control services* classified as *standard control services* – a *building block proposal*; and
  - (3) \*\*\*\*\*
  - (3A) for *direct control services* classified as *alternative control services*:
    - (i) the proposed control mechanism, a demonstration of the application of the proposed control mechanism, and the necessary supporting information; and
    - (ii) in the case of a departure from the *AER*'s likely approach to the relevant control mechanisms for *alternative control services* (as indicated in a statement *published* under clause 6.2.5(e)) a statement of the reasons justifying the departure; and
  - (4) for *direct control services* – indicative prices for each year of the *regulatory control period*; and
  - (5) \*\*\*\*\*
  - (6) an indication of the parts of the proposal (if any) the *Distribution Network Service Provider* claims to be confidential and wants suppressed from publication on that ground; and
  - (7) for *direct control services* – a proposal as to whether any (and, if so, which) components of *direct control services* should be negotiable components; and

- (8) for negotiable components of *direct control services* classified under the proposal as *negotiated distribution services* – the proposed *negotiating framework*; and
  - (9) for EnergyAustralia prescribed (transmission) standard control services - a proposed pricing methodology; and
  - (10) for EnergyAustralia negotiated distribution services classified under the proposal as *negotiated distribution services* – the proposed *negotiating framework*.
- (d) The *regulatory proposal* must comply with the requirements of, and must contain or be accompanied by the information required by any relevant *regulatory information instrument*.
  - (e) \*\*\*\*\*
  - (f) \*\*\*\*\*

## 6.9 Preliminary examination and consultation

### 6.9.1 Preliminary examination

- (a) If the *AER* considers that a *regulatory proposal* (or the accompanying information) does not comply, in any respect, with a requirement of the Law or the *Rules*, the *AER* may notify the provider that it requires resubmission of the proposal.
- (b) The notice must be given as soon as practicable and must state why, and in what respects, the *AER* considers the *regulatory proposal* to be non-compliant.

### 6.9.2 Resubmission of proposal

- (a) A *Distribution Network Service Provider* must, within 20 *business days* after receiving a notice under clause 6.9.1, resubmit its *regulatory proposal* in an amended form that complies with the relevant requirements set out in the notice.
- (b) A *Distribution Network Service Provider* may only make changes to its *regulatory proposal* to address the deficiencies identified in the notice.

### 6.9.3 Consultation

- (a) Subject to the provisions of the Law and the *Rules* about the disclosure of *confidential information*, the *AER* must *publish* a *regulatory proposal* submitted or resubmitted to it by the *Distribution Network Service Provider* under this Part, together with:



- (1) the *AER's* proposed negotiable component criteria for the provider;  
and
- (1A) in the case of EnergyAustralia negotiated distribution services provided by EnergyAustralia - the *AER's* proposed *Negotiated Distribution Service Criteria*; and
- (2) an invitation for written submissions on the *regulatory proposal* and the proposed *Negotiated Distribution Service Criteria* or proposed negotiable component criteria (or both),

after the *AER* decides that the *regulatory proposal* complies (or that there is sufficient compliance) with the requirements of the Law and the *Rules*.

- (b) The *AER* may *publish* an issues paper examining issues related to the *regulatory proposal* and the proposed negotiable component criteria (and, in the case of EnergyAustralia negotiated distribution services provided by EnergyAustralia, the proposed *Negotiated Distribution Service Criteria*), at the same time as, or subsequent to, *publication* of the invitation referred to in paragraph (a)(2).
- (c) Any person may make a written submission to the *AER* on the *regulatory proposal* or the proposed negotiable component criteria (or, in the case of EnergyAustralia negotiated distribution services provided by EnergyAustralia, the proposed *Negotiated Distribution Service Criteria*) within the time specified in the invitation referred to in paragraph (a)(2), which must be not earlier than 30 *business days* after the invitation for submissions is *published* under that paragraph.

## **6.10 Draft distribution determination and further consultation**

### **6.10.1 Making of draft distribution determination**

Subject to rule 6.14(a), the *AER* must consider any written submissions made under rule 6.9 and must make a draft distribution determination in relation to the *Distribution Network Service Provider*.

### **6.10.2 Publication of draft determination and consultation**

- (a) The *AER* must *publish*:
  - (1) the draft distribution determination; and
  - (2) notice of the making of the draft distribution determination; and
  - (3) the *AER's* reasons for suggesting that the distribution determination should be made as proposed including the draft constituent decisions

- i.e. the decisions made in accordance with rule 6.12 on which the draft distribution determination is predicated; and
- (4) notice of a predetermination conference; and
  - (5) an invitation for written submissions on its draft distribution determination.
- (b) The *AER* must hold a predetermination conference at the time, date and place specified in the notice under paragraph (a)(4) for the purpose of explaining the draft distribution determination and receiving oral submissions from interested parties. Any person may attend such a predetermination conference but the procedure to be adopted at the conference will be at the discretion of the senior *AER* representative in attendance.
- (c) Any person may make a written submission to the *AER* on the draft distribution determination within the time specified in the invitation referred to in paragraph (a)(5), which must be not earlier than 30 *business days* after the making of the draft determination.

### 6.10.3 Submission of revised proposal

- (a) In addition to making written submissions, the *Distribution Network Service Provider* may, not more than 30 *business days* after the publication of the draft distribution determination, submit a revised *regulatory proposal* to the *AER*.
- (b) A *Distribution Network Service Provider* may only make the revisions referred to in paragraph (a) so as to incorporate the substance of any changes required to address matters raised by the draft distribution determination or the *AER*'s reasons for it.
- (c) A revised *regulatory proposal* must comply with the requirements of, and must contain or be accompanied by the information required by, any relevant *regulatory information instrument*.
- (d) Subject to the provisions of the Law and the *Rules* about the disclosure of *confidential information*, the *AER* must *publish* a *regulatory proposal* submitted by the *Distribution Network Service Provider* under paragraph (a), together with the accompanying information, as soon as practicable after receipt by the *AER*.
- (e) The *AER* may, but need not, invite written submissions on the revised *regulatory proposal*.

## **6.11 Distribution determination**

### **6.11.1 Making of distribution determination**

Subject to rule 6.14(a), the *AER* must consider any submissions made on the draft distribution determination, or on any revised *regulatory proposal* submitted to it under clause 6.10.3, and must make a distribution determination in relation to the *Distribution Network Service Provider*.

### **6.11.2 Notice of distribution determination**

The *AER* must as soon as practicable, but not later than 2 months before the commencement of the relevant *regulatory control period*, *publish*:

- (1) notice of the making of the distribution determination; and
- (2) the distribution determination itself; and
- (3) the *AER's* reasons for making the distribution determination in its final form including the constituent decisions i.e. the decisions made in accordance with rule 6.12 on which the distribution determination is predicated.

### **6.11.3 Commencement of distribution determination**

- (a) A distribution determination takes effect at the commencement of the *regulatory control period* to which it relates.
- (b) If a period intervenes between the end of one *regulatory control period* and the commencement of a new distribution determination providing for the next *regulatory control period*:
  - (1) the previous distribution determination continues in force during the intervening period; and
  - (2) the last pricing proposal approved by the IPART or ICRC, as the case requires, in the previous *regulatory control period* continues in force (despite any contrary provision of these *Rules*) during the intervening period and the first *regulatory year* of the *regulatory control period*; and
  - (3) the later distribution determination is to make provision for appropriate adjustments to the *approved pricing proposals* for subsequent *regulatory years* of the *regulatory control period*.

## 6.12 Requirements relating to draft and final distribution determinations

### 6.12.1 Constituent decisions

A distribution determination is predicated on the following decisions by the *AER* (*constituent decisions*):

- (1) a decision on the classification of the services to be provided by the *Distribution Network Service Provider* during the course of the *regulatory control period*;
- (2) a decision on the *Distribution Network Service Provider's* current *building block proposal* in which the *AER* either approves or refuses to approve:
  - (i) the *annual revenue requirement* for the provider, as set out in the *building block proposal*, for each *regulatory year* of the *regulatory control period*; and
  - (ii) \*\*\*\*\*
- (3) a decision in which the *AER* either:
  - (i) acting in accordance with clause 6.5.7(c), accepts the total of the forecast capital expenditure for the *regulatory control period* that is included in the current *building block proposal*; or
  - (ii) acting in accordance with clause 6.5.7(d), does not accept the total of the forecast capital expenditure for the *regulatory control period* that is included in the current *building block proposal*, in which case the *AER* must set out its reasons for that decision and an estimate of the total of the *Distribution Network Service Provider's* required capital expenditure for the *regulatory control period* that the *AER* is satisfied reasonably reflects the *capital expenditure criteria*, taking into account the *capital expenditure factors*;
- (4) a decision in which the *AER* either:
  - (i) acting in accordance with clause 6.5.6(c), accepts the total of the forecast operating expenditure for the *regulatory control period* that is included in the current *building block proposal*; or
  - (ii) acting in accordance with clause 6.5.6(d), does not accept the total of the forecast operating expenditure for the *regulatory control period* that is included in the current *building block proposal*, in which case the *AER* must set out its reasons for that

decision and an estimate of the total of the *Distribution Network Service Provider's* required operating expenditure for the *regulatory control period* that the *AER* is satisfied reasonably reflects the *operating expenditure criteria*, taking into account the *operating expenditure factors*;

- (5) a decision in relation to the rate of return in accordance with clause 6.5.2;
- (6) a decision on the regulatory asset base as at the commencement of the *regulatory control period* in accordance with clause 6.5.1 and schedule 6.2;
- (7) a decision on the estimated cost of corporate income tax to the provider for each *regulatory year* of the *regulatory control period* in accordance with clause 6.5.3;
- (8) a decision on whether or not to approve the depreciation schedules submitted by the *Distribution Network Service Provider* and, if the *AER* decides against approving them, a decision determining depreciation schedules in accordance with clause 6.5.5(b);
- (9) a decision on how any applicable *efficiency benefit sharing scheme*, *service target performance incentive scheme*, or *demand management incentive scheme* is to apply to the *Distribution Network Service Provider*;
- (10) a decision in which the *AER* decides other appropriate amounts, values or inputs;
- (11) a decision on the control mechanism (including the X factor) for *standard control services*;
- (12) a decision on the control mechanism for *alternative control services*;
- (13) a decision on how compliance with a relevant control mechanism is to be demonstrated;
- (14) a decision on the additional *pass through events* that are to apply for the *regulatory control period*;
- (15) a decision on any *negotiating framework* that is to apply to the *Distribution Network Service Provider* for the *regulatory control period* (which may be the *negotiating framework* as proposed by the provider, some variant of it, or a framework substituted by the *AER*);
- (16) if relevant, a decision in which the *AER* decides the *Negotiated Distribution Service Criteria* for the *Distribution Network Service Provider*;

- (16A) a decision in which the *AER* decides which, if any, components of *direct control services* are negotiable components;
- (16B) if relevant, a decision in which the *AER* decides the negotiable component criteria for the *Distribution Network Service Provider*;
- (17) a decision on the procedures for assigning customers to *tariff classes*, or reassigning customers from one *tariff class* to another (including any applicable restrictions);
- (18) a decision on whether depreciation for establishing the regulatory asset base as at the commencement of the following *regulatory control period* is to be based on actual or forecast capital expenditure;
- (19) a decision on how the *Distribution Network Service Provider* is to report to the *AER* on its recovery of *Transmission Use of System* charges for each *regulatory year* of the *regulatory control period* and on the adjustments to be made to subsequent *pricing proposals* to account for over or under recovery of those charges;
- (20) for EnergyAustralia prescribed (transmission) standard control services – a decision on the proposed pricing methodology, in which the *AER* either approves or refuses to approve that methodology and sets out reasons for its decision.

### **6.12.1A Division of EnergyAustralia’s revenue**

- (a) The *AER* must, in the distribution determination for EnergyAustralia, divide the revenue calculated under Part C into the following two portions:
  - (1) a portion relevant to EnergyAustralia prescribed (transmission) standard control services;
  - (2) a portion relevant to other *standard control services* provided by EnergyAustralia,based on EnergyAustralia’s approved Cost Allocation Method.
- (b) The pricing rules in Part J of Chapter 6A are to be applied to the portion referred to in paragraph (a)(1) instead of the pricing rules in Part I of transitional Chapter 6.
- (c) The pricing rules in Part I of transitional Chapter 6 are to be applied to the portion referred to in paragraph (a)(2).

### 6.12.2 Reasons for decisions

The reasons given by the *AER* for a draft distribution determination under rule 6.10 or a final distribution determination under rule 6.11 must set out the basis and rationale of the determination, including:

- (1) details of the qualitative and quantitative methods applied in any calculations and formulae made or used by the *AER*; and
- (2) the values adopted by the *AER* for each of the input variables in any calculations and formulae, including:
  - (i) whether those values have been taken or derived from the provider's current *building block proposal*; and
  - (ii) if not, the rationale for the adoption of those values; and
- (3) details of any assumptions made by the *AER* in undertaking any material qualitative and quantitative analyses; and
- (4) reasons for the making of any decisions, the giving or withholding of any approvals, and the exercise of any discretions, as referred to in this Chapter 6, for the purposes of the determination.

### 6.12.3 Extent of *AER*'s discretion in making distribution determinations

- (a) Subject to this clause and other provisions of this Chapter 6 explicitly negating or limiting the *AER*'s discretion, the *AER* has a discretion to accept or approve, or to refuse to accept or approve, any element of a *regulatory proposal*.
- (b) \*\*\*\*\*
- (c) \*\*\*\*\*
- (d) The *AER* must approve the *total revenue requirement* for a *Distribution Network Service Provider* for a *regulatory control period*, and the *annual revenue requirement* for each *regulatory year* of the *regulatory control period*, as set out in the provider's current *building block proposal*, if the *AER* is satisfied that those amounts have been properly calculated using the *post-tax revenue model* on the basis of amounts calculated, determined or forecast in accordance with the requirements of Part C of this Chapter 6.
- (e) \*\*\*\*\*
- (f) If the *AER* refuses to approve an amount, value or methodology referred to in clause 6.12.1, the substitute amount, value or methodology on which the distribution determination is based must be:

- (1) determined on the basis of the current *regulatory proposal*; and
  - (2) amended from that basis only to the extent necessary to enable it to be approved in accordance with the *Rules*.
- (g) The *AER* must approve a proposed *negotiating framework* if the *AER* is satisfied that it adequately complies with the requirements of Part D or DA (as the case requires).
- (h) If the *AER* refuses to approve a proposed *negotiating framework*, any approved amended *negotiating framework* must be:
- (1) determined on the basis of the current proposed *negotiating framework*; and
  - (2) amended from that basis only to the extent necessary to enable it to be approved in accordance with the *Rules*.
- (i) The *AER* must approve EnergyAustralia's proposed pricing methodology for EnergyAustralia prescribed (transmission) standard control services if the *AER* is satisfied that the methodology:
- (1) gives effect to and is consistent with the *Pricing Principles for Prescribed Transmission Services*; and
  - (2) complies with the requirements of the *pricing methodology guidelines*.

### **6.13 Revocation and substitution of distribution determination for wrong information or error**

- (a) The *AER* may (but is not required to) revoke a distribution determination during a *regulatory control period* if it appears to the *AER* that the determination is affected by a material error or deficiency of one or more of the following kinds:
- (1) a clerical mistake or an accidental slip or omission;
  - (2) a miscalculation or misdescription;
  - (3) a defect in form;
  - (4) a deficiency resulting from the provision of false or materially misleading information to the *AER*.
- (b) If the *AER* revokes a distribution determination under paragraph (a), the *AER* must make a new distribution determination in substitution for the revoked determination to apply for the remainder of the *regulatory control period* for which the revoked determination was to apply.



- (c) If the *AER* revokes a distribution determination under paragraph (a), the substituted determination must only vary from the revoked determination to the extent necessary to correct the relevant error or deficiency.
- (d) The *AER* may only revoke and substitute a distribution determination under this rule 6.13, if it has first consulted with the relevant *Distribution Network Service Provider* and such other persons as it considers appropriate.

## 6.14 Miscellaneous

- (a) The *AER* may, but is not required to, consider any submission made pursuant to an invitation for submissions after the time for making the submission has expired.
- (b) Nothing in this Part E is to be construed as precluding the *AER* from *publishing* any issues, consultation and discussion papers, or holding any conferences and information sessions, that the *AER* considers appropriate.
- (c) Subject to paragraph (d), as soon as practicable after the *AER* receives a submission in response to an invitation referred to in clause 6.9.3(a)(2) or 6.10.2(a)(5) (whether or not the submission was made before the time for making it has expired), the *AER* must *publish* that submission.
- (d) The *AER* must not *publish* a submission referred to in paragraph (c) to the extent it contains information which has been clearly identified as confidential by the person making the submission.
- (e) The *AER* may give such weight to *confidential information* identified in accordance with paragraph (d) in a submission as it considers appropriate, having regard to the fact that such information has not been made publicly available.
- (f) Paragraph (d) does not apply to the extent that any other provision of the Law or the *Rules* permits or requires such information to be publicly released by the *AER*.

## Part F Cost Allocation

### 6.15 Cost allocation

#### 6.15.1 Duty to comply with Cost Allocation Method

- (a) A *Distribution Network Service Provider* must comply with the Cost Allocation Method that has been approved in respect of that provider from time to time by the *AER* under this rule 6.15 in respect of the regulatory control period 2009-2014.

- (b) A *Distribution Network Service Provider* is, during the regulatory control period 2009-2014, also subject to the requirements of Part F of general Chapter 6 but only for the purposes of and in connection with the distribution determination to be made for the subsequent *regulatory control period*.

**6.15.2** \*\*\*\*\*

**6.15.3** \*\*\*\*\*

**6.15.4** \*\*\*\*\*

### **Provisions applicable to the NSW Distribution Network Service Providers**

#### **6.15.5 Cost Allocation Guidelines (NSW)**

The Accounting Separation Code for Electricity Distributors in NSW prepared by the IPART and in force immediately before the start of the regulatory control period 2009-2014 in relation to the NSW Distribution Network Service Providers are deemed to be Cost Allocation Guidelines made by the *AER* for the regulatory control period 2009-2014.

#### **6.15.6 Cost Allocation Method (NSW)**

- (a) Each NSW Distribution Network Service Provider must submit to the *AER* for its approval a document setting out its proposed Cost Allocation Method for the regulatory control period 2009-2014 within 1 month after the commencement date.
- (b) The Cost Allocation Method proposed by a NSW Distribution Network Service Provider must:
  - (1) give effect to and be consistent with the Cost Allocation Guidelines;  
and
  - (2) be prepared using, as far as practicable but subject to subparagraph (1), the same cost allocation method as it last used when preparing its regulatory accounts for submission to the IPART.
- (c) The *AER* may approve or refuse to approve a Cost Allocation Method submitted under paragraph (a), but must approve it if the *AER* is satisfied that it:
  - (1) gives effect to and is consistent with the Cost Allocation Guidelines;  
and

- (2) has been prepared, as far as practicable but subject to subparagraph (1), using the cost allocation method the relevant *Distribution Network Service Provider* last used when preparing its regulatory accounts for submission to the IPART.
- (d) The *AER* must notify the relevant *Distribution Network Service Provider* of its decision to approve or refuse to approve the Cost Allocation Method submitted to it under paragraph (a) within 2 months of its submission, failing which the *AER* will be taken to have approved it.
- (e) As part of giving any approval referred to in paragraph (c), the *AER* may, after consulting with the relevant *Distribution Network Service Provider*, amend the Cost Allocation Method submitted to it, in which case the Cost Allocation Method as so amended will be taken to be approved by the *AER*.
- (f) A NSW Distribution Network Service Provider may, with the *AER*'s approval, amend its Cost Allocation Method from time to time but:
  - (1) the amendment:
    - (i) may be approved on condition that the *Distribution Network Service Provider* agree to incorporate into the amendment specified additional changes to the Cost Allocation Method the *AER* reasonably considers necessary or desirable as a result of the amendment as submitted; and
    - (ii) if approved on such a condition, does not take effect unless and until the *Distribution Network Service Provider* notifies the *AER* of its agreement;
  - (2) if 6 months elapse from the date of the submission of the amendment and the *AER* has not notified the *Distribution Network Service Provider* within that period of its approval or refusal to approve the amendment, the amendment is, at the end of that period, conclusively presumed to have been unconditionally approved.
- (g) A NSW Distribution Network Service Provider must maintain a current copy of its Cost Allocation Method on its website.

## **Provisions applicable to the ACT Distribution Network Service Provider**

### **6.15.7 Cost Allocation Principles (ACT)**

The following principles constitute the Cost Allocation Principles for the ACT Distribution Network Service Provider:

- (1) the detailed principles and policies used by the ACT Distribution Network Service Provider to allocate costs between different

categories of *distribution services* must be described in sufficient detail to enable the *AER* to replicate reported outcomes through the application of those principles and policies;

- (2) the allocation of costs must be determined according to the substance of a transaction or event rather than its legal form;
- (3) only the following costs may be allocated to a particular category of *distribution services*:
  - (i) costs which are directly attributable to the provision of those services; and
  - (ii) costs which are not directly attributable to the provision of those services but which are incurred in providing those services, in which case such costs must be allocated to the provision of those services using an appropriate allocator which should:
    - (A) except to the extent the cost is immaterial or a causal based method of allocation cannot be established without undue cost and effort, be causation based; and
    - (B) to the extent the cost is immaterial or a causal based method of allocation cannot be established without undue cost and effort, be an allocator that accords with a well accepted cost allocation method;
- (4) any cost allocation method which is used, the reasons for using that method and the numeric quantity (if any) of the chosen allocator must be clearly described;
- (5) the same cost must not be allocated more than once;
- (6) the principles, policies and approach used to allocate costs must be consistent with the Distribution Ring-Fencing Guidelines;
- (7) costs which have been allocated to a particular service cannot be reallocated to another service during the course of a *regulatory control period*.

#### **6.15.8 Cost Allocation Method (ACT)**

- (a) The ACT Distribution Network Service Provider must submit to the *AER* for its approval a document setting out its proposed Cost Allocation Method for the regulatory control period 2009-2014 within 1 month after the commencement date.
- (b) The Cost Allocation Method proposed by the ACT Distribution Network Service Provider must:

- (1) be prepared using, as far as practicable, the same cost allocation method as it last used when preparing its regulatory accounts for submission to the ICRC; and
  - (2) subject to subparagraph (1), be consistent with the Cost Allocation Principles.
- (c) The *AER* may approve or refuse to approve the Cost Allocation Method submitted under paragraph (a), but must approve it if the *AER* is satisfied that it:
- (1) has been prepared, as far as practicable, using the cost allocation method the ACT Distribution Network Service Provider last used when preparing its regulatory accounts for submission to the ICRC; and
  - (2) subject to subparagraph (1), is consistent with the Cost Allocation Principles.
- (d) The *AER* must notify the ACT Distribution Network Service Provider of its decision to approve or refuse to approve the Cost Allocation Method submitted to it under paragraph (a) within 2 months of its submission, failing which the *AER* will be taken to have approved it.
- (e) As part of giving any approval referred to in paragraph (c), the *AER* may, after consulting with the ACT Distribution Network Service Provider, amend the Cost Allocation Method submitted to it, in which case the Cost Allocation Method as so amended will be taken to be approved by the *AER*.
- (f) The ACT Distribution Network Service Provider may, with the *AER*'s approval, amend its Cost Allocation Method from time to time but:
- (1) the amendment:
    - (i) may be approved on condition that the provider agree to incorporate into the amendment specified additional changes to the Cost Allocation Method the *AER* reasonably considers necessary or desirable as a result of the amendment as submitted; and
    - (ii) if approved on such a condition, does not take effect unless and until the provider notifies the *AER* of its agreement;
  - (2) if 6 months elapse from the date of the submission of the amendment and the *AER* has not notified the provider within that period of its approval or refusal to approve the amendment, the amendment is, at the end of that period, conclusively presumed to have been unconditionally approved.

- (g) The ACT Distribution Network Service Provider must maintain a current copy of its Cost Allocation Method on its website.

**Part G \*\*\*\*\***

**Part H Ring-Fencing Arrangements for Distribution Network Service Providers**

**6.17 Distribution Ring-Fencing Guidelines**

**6.17.1 Compliance with Distribution Ring-Fencing Guidelines**

- (a) All *Distribution Network Service Providers* must comply with the *Distribution Ring-Fencing Guidelines* prepared in accordance with clause 6.17.2.
- (b) Any Distribution Ring-Fencing Guidelines prepared by the IPART and in force immediately before the start of the regulatory control period 2009-2014 in relation to the NSW Distribution Network Service Providers are deemed to have been prepared by the *AER* under clause 6.17.2 and are to be complied with by the NSW Distribution Network Service Providers.
- (c) Any Distribution Ring-Fencing Guidelines prepared by the ICRC and in force immediately before the start of the regulatory control period 2009-2014 in relation to the ACT Distribution Network Service Provider are deemed to have been prepared by the *AER* under clause 6.17.2 and are to be complied with by the ACT Distribution Network Service Provider.
- (d) Any waiver granted by the IPART under clause 6.2 of the *Distribution Ring-Fencing Guidelines* prepared by the IPART in relation to the regulatory control period 2004-2009 and in force at the end of that period is deemed to have been given by the *AER* in relation to the regulatory control period 2009-2014.
- (e) For the purposes of paragraphs (b) and (c), the provisions of the guidelines prepared by the IPART and ICRC respectively and referred to in those paragraphs have effect as if references to the IPART and ICRC respectively were references to the *AER*, and with any other necessary modifications.
- (f) EnergyAustralia must, in respect of the EnergyAustralia transmission support network, comply with the *Distribution Ring-Fencing Guidelines* and the *Transmission Ring-Fencing Guidelines*.
- (g) The guidelines referred to in paragraphs (b) and (c) continue in force during and after the end of the regulatory control period 2009-2014 subject to amendment, revocation or replacement by guidelines made under the new regulatory regime as defined in clause 11.14.2.

## 6.17.2 Development of Distribution Ring-Fencing Guidelines

- (a) Subject to clause 6.17.1, guidelines may be developed by the *AER* for the accounting and functional separation of the provision of *direct control services* by *Distribution Network Service Providers* from the provision of other services by *Distribution Network Service Providers* (the *Distribution Ring-Fencing Guidelines*). The guidelines may vary in application as between different *participating jurisdictions*.

*Note:*

*Clause 11.14.5 will, subject to clause 6.17.1, have a bearing on the application of these guidelines in certain cases.*

- (b) The *Distribution Ring-Fencing Guidelines* may include, but are not limited to:
- (1) provisions defining the need for and extent of:
    - (i) legal separation of the entity through which a *Distribution Network Service Provider* provides *network services* from any other entity through which it conducts business; and
    - (ii) the establishment and maintenance of consolidated and separate accounts for *standard control services*, *alternative control services* and other services provided by the *Distribution Network Service Provider*; and
    - (iii) allocation of costs between *standard control services*, *alternative control services* and other services provided by the *Distribution Network Service Provider*; and
    - (iv) limitations on the flow of information between the *Distribution Network Service Provider* and any other person; and
    - (v) limitations on the flow of information where there is the potential for a competitive disadvantage between those parts of the *Distribution Network Service Provider's* business which provide *direct control services* and parts of the provider's business which provide any other services; and
  - (2) provisions allowing the *AER* to add to or to waive a *Distribution Network Service Provider's* obligations under the *Distribution Ring-Fencing Guidelines*.
- (c) In developing or amending the *Distribution Ring-Fencing Guidelines* the *AER* must consider, without limitation, the need, so far as practicable, for consistency between the *Distribution Ring-Fencing Guidelines* and the *Transmission Ring-Fencing Guidelines*.

- (d) In developing or amending the *Distribution Ring-Fencing Guidelines*, the AER must consult with *participating jurisdictions, Registered Participants, NEMMCO* and other *interested parties*, and such consultation must be otherwise in accordance with the *distribution consultation procedures* in Part G of general Chapter 6.

## Part I Distribution Pricing Rules

### 6.18 Distribution Pricing Rules

#### 6.18.1 Application of this Part

This Part applies to tariffs and *tariff classes* related to *direct control services*.

#### 6.18.2 Pricing proposals

- (a) *A Distribution Network Service Provider* must:
- (1) submit to the AER, as soon as practicable, and in any case within 15 *business days*, after *publication* of the distribution determination, a *pricing proposal* (the "*initial pricing proposal*") for the first *regulatory year* of the *regulatory control period*; and
  - (2) submit to the AER, at least 2 months before the commencement of the second and each subsequent *regulatory year* of the *regulatory control period*, a further *pricing proposal* (an "*annual pricing proposal*") for the relevant *regulatory year*.
- (b) *A pricing proposal* must:
- (1) set out the *tariff classes* that are to apply for the relevant *regulatory year*; and
  - (2) set out the proposed tariffs for each *tariff class*; and
  - (3) set out, for each proposed tariff, the *charging parameters* and the elements of service to which each *charging parameter* relates; and
  - (4) set out, for each *tariff class* related to *standard control services*, the expected weighted average revenue for the relevant *regulatory year* and also for the current *regulatory year*; and
  - (5) set out the nature of any variation or adjustment to the tariff that could occur during the course of the *regulatory year* and the basis on which it could occur; and
- (5A) in the case of a NSW Distribution Network Service Provider – set out the amount paid, or required by an order under the Energy and



Utilities Administration Act 1987 of New South Wales to be paid, by the provider to the Climate Change Fund in or in respect of the relevant *regulatory year* and reflect that amount in the expected revenue for the relevant *regulatory year*; and

- (6) set out how charges incurred by the *Distribution Network Service Provider* for *transmission use of system services* are to be passed on to customers and any adjustments to tariffs resulting from over or under recovery of those charges in the previous *regulatory year*; and
  - (7) demonstrate compliance with the *Rules* and any applicable distribution determination; and
  - (8) describe the nature and extent of change from the previous *regulatory year* and demonstrate that the changes comply with the *Rules* and any applicable distribution determination.
- (c) The *AER* must on receipt of a *pricing proposal* from a *Distribution Network Service Provider* publish the proposal.

### 6.18.3 Tariff classes

- (a) A *pricing proposal* must define the *tariff classes* into which customers for *direct control services* are divided.
- (b) Each customer for *direct control services* must be a member of 1 or more *tariff classes*.
- (c) Separate *tariff classes* must be constituted for customers to whom *standard control services* are supplied and customers to whom *alternative control services* are supplied (but a customer for both *standard control services* and *alternative control services* may be a member of 2 or more *tariff classes*).
- (d) A *tariff class* must be constituted with regard to:
  - (1) the need to group customers together on an economically efficient basis; and
  - (2) the need to avoid unnecessary transaction costs.

### 6.18.4 Principles governing assignment or re-assignment of customers to tariff classes and assessment and review of basis of charging

- (a) In formulating provisions of a distribution determination governing the assignment of customers to *tariff classes* or the re-assignment of customers from one *tariff class* to another, the *AER* must have regard to the following principles:

- (1) customers should be assigned to *tariff classes* on the basis of one or more of the following factors:
  - (i) the nature and extent of their usage;
  - (ii) the nature of their *connection* to the *network*;
  - (iii) whether remotely-read interval metering or other similar metering technology has been installed at the customer's premises as a result of a *regulatory obligation or requirement*;
- (2) customers with a similar *connection* and usage profile should be treated on an equal basis;
- (3) however, customers with micro-generation facilities should be treated no less favourably than customers without such facilities but with a similar load profile;
- (4) a *Distribution Network Service Provider's* decision to assign a customer to a particular *tariff class*, or to re-assign a customer from one *tariff class* to another should be subject to an effective system of assessment and review.

*Note:*

*If (for example) a customer is assigned (or reassigned) to a tariff class on the basis of the customer's actual or assumed maximum demand, the system of assessment and review should allow for the reassignment of a customer who demonstrates a reduction or increase in maximum demand to a tariff class that is more appropriate to the customer's load profile.*

- (b) If the *charging parameters* for a particular tariff result in a basis of charge that varies according to the usage or load profile of the customer, a distribution determination must contain provisions for an effective system of assessment and review of the basis on which a customer is charged.

### **6.18.5 Pricing principles**

- (a) For each *tariff class*, the revenue expected to be recovered should lie on or between:
  - (1) an upper bound representing the stand alone cost of serving the customers who belong to that class; and
  - (2) a lower bound representing the avoidable cost of not serving those customers.
- (b) A tariff, and if it consists of 2 or more *charging parameters*, each *charging parameter* for a *tariff class*:

- (1) must take into account the long run marginal cost for the service or, in the case of a *charging parameter*, for the element of the service to which the *charging parameter* relates; and
- (2) must be determined having regard to:
  - (i) transaction costs associated with the tariff or each *charging parameter*; and
  - (ii) whether customers of the relevant *tariff class* are able or likely to respond to price signals.
- (c) If, however, as a result of the operation of paragraph (b), the *Distribution Network Service Provider* may not recover the expected revenue, the provider must adjust its tariffs so as to ensure recovery of expected revenue with minimum distortion to efficient patterns of consumption.

#### 6.18.6 Side constraints on tariffs for standard control services

- (a) This clause applies only to *tariff classes* related to the provision of *standard control services*.
- (b) The expected weighted average revenue to be raised from a *tariff class* for a particular *regulatory year* of a *regulatory control period* must not exceed the corresponding expected weighted average revenue for the preceding *regulatory year* by more than the permissible percentage.
- (c) The permissible percentage is the greater of the following:
  - (1) the CPI-X limitation on any increase in the *Distribution Network Service Provider's* expected weighted average revenue between the two *regulatory years* plus 2%;  
*Note:*  
*The calculation is of the form  $(1 + CPI)(1 - X)(1 + 2\%)$*
  - (2) CPI plus 2%.  
*Note:*  
*The calculation is of the form  $(1 + CPI)(1 + 2\%)$*
- (d) In deciding whether the permissible percentage has been exceeded in a particular *regulatory year*, the following are to be disregarded:
  - (1) the recovery of revenue to accommodate a variation to the distribution determination under rule 6.6 or 6.13;

- (2) the recovery of revenue to accommodate pass through of charges for *transmission use of system services* to customers.
- (e) This clause does not, however, limit the extent a tariff for customers with remotely-read interval metering or other similar metering technology may vary according to the time or other circumstances of the customer's usage.

### **6.18.7 Recovery of charges for transmission use of system services**

- (a) A *pricing proposal* must provide for tariffs designed to pass on to customers the charges to be incurred by the *Distribution Network Service Provider* for *transmission use of system services*.
- (b) The amount to be passed on to customers for a particular *regulatory year* must not exceed the estimated amount of the *transmission use of system* charges for the relevant *regulatory year* adjusted for over or under recovery in the previous *regulatory year*.
- (c) The extent of the over or under recovery is the difference between:
  - (1) the amount actually paid by the *Distribution Network Service Provider* by way of *transmission use of system* charges in the previous *regulatory year*; and
  - (2) the amount passed on to customers by way of *transmission use of system* charges by the *Distribution Network Service Provider* in the previous *regulatory year*.

### **6.18.8 Approval of pricing proposal**

- (a) The *AER* must approve a *pricing proposal* if the *AER* is satisfied that:
  - (1) the proposal complies with this Part and any applicable distribution determination; and
  - (2) all forecasts associated with the proposal are reasonable.
- (b) If the *AER* determines that a *pricing proposal* is deficient:
  - (1) the *AER* may require the *Distribution Network Service Provider*, within 10 *business days* after receiving notice of the determination, to re-submit the proposal with the amendments necessary to correct the deficiencies identified in the determination and (unless the *AER* permits further amendment) no further amendment; or
  - (2) the *AER* may itself make the amendments necessary to correct the deficiencies.

- (c) If the service provider fails to comply with a requirement under paragraph (b), or the resubmitted proposal fails to correct the deficiencies in the former proposal, the *AER* may itself amend the proposal to bring it into conformity with the requirements of this Part and any applicable distribution determination.
- (d) An *approved pricing proposal* takes effect:
  - (1) in the case of an initial *pricing proposal* – at the commencement of the first *regulatory year* of the *regulatory control period* for which the distribution determination is made; and
  - (2) in the case of an annual *pricing proposal* – at the commencement of the *regulatory year* to which the proposal relates.

*Note:*

*The operation of this paragraph may, in some instances, be displaced or modified by clause 6.11.3(b).*

## **6.18.9 Publication of information about tariffs and tariff classes**

- (a) A *Distribution Network Service Provider* must maintain on its website:
  - (1) a statement of the provider's *tariff classes* and the tariffs applicable to each class; and
  - (2) for each tariff – the *charging parameters* and the elements of the service to which each *charging parameter* relates; and
  - (3) a statement of expected price trends (to be updated for each *regulatory year*) giving an indication of how the *Distribution Network Service Provider* expects prices to change over the *regulatory control period* and the reasons for the expected changes.
- (b) The information for a particular *regulatory year* must, if practicable, be posted on the website 20 *business days* before the commencement of the relevant *regulatory year* and, if that is not practicable, as soon as practicable thereafter.

## **6.19. Data Required for Distribution Service Pricing**

### **6.19.1 Forecast use of networks by Distribution Customers and Embedded Generators**

Any information required by *Distribution Network Service Providers* must be provided by *Service Applicants* as part of the *connection* and access requirements set out in Chapter 5.

## 6.19.2 Confidentiality of distribution network pricing information

- (a) Subject to the Law and the *Rules*, all information about a *Service Applicant* or *Distribution Network User* used by *Distribution Network Service Providers* for the purposes of *distribution service* pricing is confidential information and must be treated in accordance with rule 8.6.
- (b) No requirement in this Chapter 6 to publish information about a *tariff class* is to be construed as requiring publication of information about an individual customer.

## Part J Billing and Settlements

### 6.20 Billing and Settlements Process

This clause describes the manner in which *Distribution Customers* and *Embedded Generators* are billed by *Distribution Network Service Providers* for *distribution services* and how payments for *distribution services* are settled.

#### 6.20.1 Billing for distribution services

- (a) A *Distribution Network Service Provider* must bill *Distribution Network Users* for *distribution services* as follows:
  - (1) *Embedded Generators*:
    - (i) by applying the *entry charge* as a fixed annual charge to each *Embedded Generator*; and
    - (ii) by applying any other charge the *Distribution Network Service Provider* makes consistently with these *Rules* and the applicable distribution determination.
  - (2) *Distribution Customers*:

The charges to *Distribution Customers* must be determined according to use of the *distribution network* as determined in accordance with a *metrology procedure* or, in the absence of a *metrology procedure* allowing such a determination to be made, by *meter* or by agreement between the *Distribution Customer* and the *Distribution Network Service Provider* by applying one or more of the following measures:

- (i) demand-based prices to the *Distribution Customer's* metered or agreed half-hourly demand;
- (ii) energy-based prices to the *Distribution Customer's* metered or agreed energy;

- (iii) the *Distribution Customer* charge determined under this clause as a fixed periodic charge to each *Distribution Customer*;
  - (iv) a fixed periodic charge, a prepayment or other charge determined by agreement with the *Distribution Customer*;
  - (v) any other measure the *Distribution Network Service Provider* is authorised to apply by the applicable distribution determination.
- (b) Subject to paragraph (c), where a *Distribution Customer* (other than a *Market Customer*) incurs *distribution service* charges, the *Distribution Network Service Provider* must bill the *Market Customer* from whom the *Distribution Customer* purchases electricity directly or indirectly for such *distribution services* in accordance with paragraph (a)(2).
- (c) If a *Distribution Customer* and the *Market Customer* from whom it purchases electricity agree, the *Distribution Network Service Provider* may bill the *Distribution Customer* directly for *distribution services* used by that *Distribution Customer* in accordance with paragraph (a)(2).
- (d) *Distribution Network Service Providers* must:
  - (1) calculate *transmission service charges* and *distribution service charges* for all connection points in their *distribution network*; and
  - (2) pay to *Transmission Network Service Providers* the *transmission service charges* incurred in respect of use of a *transmission network* at each *connection point* on the relevant *transmission network*.
- (e) Charges for *distribution services* based on metered kW, kWh, kVA, or kVAh for:
  - (1) *Embedded Generators* that are *Market Generators*; and
  - (2) *Market Customer*; and
  - (3) *Second-Tier Customers*;must be calculated by the *Distribution Network Service Provider* from:
  - (1) *settlements ready data* obtained from *NEMMCO's metering database*, for those *Embedded Generators*, *Market Customers* and *Second-Tier Customers* with *connection points* that have a type 1, 2, 3 or 4 *metering installation*; and
  - (2) *energy data*, in accordance with a *metrology procedure* that allows the *Distribution Network Service Provider* to use *energy data* for this purpose, or otherwise *settlements ready data* obtained from *NEMMCO's metering database*, for those *Embedded Generators*,

*Market Customers and Second-Tier Customers with connection points that have a type 5, 6 or 7 metering installation.*

- (f) Charges for *distribution services* based on metered kW, kWh, kVA or kVAh for:
- (1) *Embedded Generators* that are not *Market Generators*; and
  - (2) *Non-Registered Customers*; and
  - (3) *franchise customers*,
- must be calculated by the *Distribution Network Service Provider* using data that is consistent with the *metering data* used by the relevant *Local Retailer* in determining *energy settlements*.
- (g) The *Distribution Network Service Provider* may bill the relevant *Local Retailer* for *distribution services* used by *Non-Registered Customers* and *franchise customers*.
- (h) Where the billing for a *Distribution Customer* for a particular *financial year* is based on quantities which are undefined until after the commencement of the *financial year*, charges must be estimated from the previous year's billing quantities with a reconciliation to be made when the actual billing quantities are known.
- (i) Where the previous year's billing quantities are unavailable or no longer suitable, nominated quantities may be used as agreed between the parties.

## **6.20.2 Minimum information to be provided in distribution network service bills**

The following is the minimum information that must be provided with a bill for a *network coupling point* issued by a *Distribution Network Service Provider* directly to a *Registered Participant*:

- (1) the *network coupling point* identifier; and
- (2) the dates on which the billing period starts and ends; and
- (3) the identifier of the *distribution service* price from which the *network coupling point* charges are calculated; and
- (4) measured quantities, billed quantities, prices and amounts charged for each component of the total *distribution service* account.



### 6.20.3 Settlement between Distribution Network Service Providers

The billing and settlement process specified in this clause must be applied to all *Distribution Customers* including other *Distribution Network Service Providers*.

### 6.20.4 Obligation to pay

A *Distribution Network User* must pay *distribution service* charges properly charged to it and billed in accordance with this clause by the due date specified in the bill.

## Part K Prudential requirements, capital contributions and prepayments

### 6.21 Distribution Network Service Provider Prudential Requirements

This clause sets out the arrangements by which *Distribution Network Service Providers* may minimise financial risks associated with investment in *network assets* and provides for adoption of cost-reflective payment options in conjunction with the use of average distribution prices. The clause also prevents *Distribution Network Service Providers* from receiving income twice for the same assets through prudential requirements and *distribution service* prices.

#### 6.21.1 Prudential requirements for distribution network service

- (a) A *Distribution Network Service Provider* may require an *Embedded Generator* or *Distribution Customer* that requires a new *connection* or a modification in service for an existing *connection* to establish prudential requirements for *connection service* and/or *distribution use of system service*.
- (b) Prudential requirements for *connection service* and/or *distribution use of system service* are a matter for negotiation between the *Distribution Network Service Provider* and the *Embedded Generator* or *Distribution Customer* and the terms agreed must be set out in the *connection agreement* between the *Distribution Network Service Provider* and the *Embedded Generator* or *Distribution Customer*.
- (c) The *connection agreement* may include one or more of the following provisions:
  - (1) the conditions under which and the time frame within which other *Distribution Network Users* who use that part of the *distribution network* contribute to refunding all or part of the payments;
  - (2) the conditions under which financial arrangements may be terminated; and

- (3) the conditions applying in the event of default by the *Distribution Customer* or *Embedded Generator*.
- (d) The prudential requirements may incorporate, but are not limited to, one or more of the following arrangements:
  - (1) financial capital contributions;
  - (2) non-cash contributions;
  - (3) *distribution service* charge prepayments;
  - (4) guaranteed minimum *distribution service charges* for an agreed period;
  - (5) guaranteed minimum *distribution service* quantities for an agreed period;
  - (6) provision for financial guarantees for *distribution service charges*.

### **6.21.2 Capital contributions, prepayments and financial guarantees**

Despite any other provision in this Chapter, in relation to capital contributions, prepayments and financial guarantees:

- (1) the *Distribution Network Service Provider* is not entitled to recover, under a mechanism for the economic regulation of *direct control services*, any component representing asset related costs for assets provided by *Distribution Network Users*; and
- (2) the *Distribution Network Service Provider* may receive a capital contribution, prepayment and/or financial guarantee up to the provider's future revenue related to the provision of *direct control services* for any new assets installed as part of a new *connection* or modification to an existing *connection*, including any *augmentation* to the *distribution network*; and
- (3) where assets have been the subject of a contribution or prepayment, the *Distribution Network Service Provider* must amend the provider's revenue related to the provision of *direct control services*.

### **6.21.3 Treatment of past prepayments and capital contributions**

- (a) Payments made by *Distribution Customers* and *Embedded Generators* for *distribution service* prior to 13 December 1998 must be made in accordance with any contractual arrangements with the relevant *Distribution Network Service Providers* applicable at that time.

- (b) Where contractual arrangements referred to in clause 6.22.2(a) are not in place, past *distribution service* prepayments or capital contributions may be incorporated in the capital structure of the *Distribution Network Service Provider's* business.
- (c) The *AER* may intervene in and resolve any dispute under this clause which cannot be resolved between the relevant *Distribution Network Service Provider* and *Distribution Customer* or *Embedded Generator*.

#### **6.21.4 Application of IPART and ICRC guidelines regarding capital contribution charges**

- (a) Capital contribution charges by the NSW Distribution Network Service Providers in respect of the regulatory control period 2009-2014 are to be determined in accordance with Determination No 1 2002 made by the IPART under section 11(3) of the Independent Pricing and Regulatory Act 1992 (NSW) in 2002.
- (b) Capital contribution charges by the ACT Distribution Network Service Provider in respect of the regulatory control period 2009-2014 are to be determined in accordance with the Electricity Network Capital Contributions Code made by the ICRC in 2001.

### **Part L Dispute resolution**

#### **6.22 Dispute Resolution**

##### **6.22.1 Dispute Resolution by the AER**

- (a) A dispute between a *Distribution Network Service Provider* and a *Service Applicant* as to the *terms and conditions of access* to a *direct control service* or to a *negotiated distribution service* is an access dispute for the purposes of Part 10 of the Law.
- (b) A dispute between a *Distribution Network Service Provider* and a *Service Applicant* about *access charges* is an access dispute for the purposes of Part 10 of the Law.
- (c) A dispute between a *Distribution Network Service Provider* and a *Connection Applicant* about matters referred to in clause 5.5(f) or clause 5.5(h) is an access dispute for the purposes of Part 10 of the Law.

##### **6.22.2 Determination of dispute**

- (a) In determining an access dispute about *terms and conditions of access* to a *direct control service* (other than a negotiable component), the *AER* must apply:

- (1) in relation to price, the *Distribution Network Service Provider's approved pricing proposal* or (in the case of an EnergyAustralia prescribed (transmission) standard control service) EnergyAustralia's approved pricing methodology, as the case requires; and
  - (2) in relation to other terms and conditions, Chapters 4, 5, this Chapter 6 and Chapter 7 of the *Rules* and any other *applicable regulatory instrument*; and
  - (3) in relation to all *terms and conditions of access* (including price) the decisions of *NEMMCO* or the *AER* where those decisions relate to those terms and conditions and are made under Chapters 4, 5, this Chapter 6 and Chapter 7 of the *Rules*.
- (a1) In determining an access dispute about *terms and conditions of access* to a negotiable component of a *direct control service*, the *AER* must apply:
- (1) in relation to price (including *access charges*), the negotiable component criteria that are applicable to the dispute in accordance with the relevant distribution determination; and
  - (2) in relation to other terms and conditions, the negotiable component criteria that are applicable to the dispute and Chapters 4, 5, this Chapter 6 and Chapter 7 of the *Rules*; and
  - (3) in relation to all *terms and conditions of access* (including price) the decisions of *NEMMCO* or the *AER* where those decisions relate to those terms and conditions and are made under Chapters 4, 5, this Chapter 6 and Chapter 7 of the *Rules*;
- and must have regard:
- (4) to the relevant *negotiating framework* prepared by the *Distribution Network Service Provider* and approved by the *AER*.
- (b) In determining an access dispute about the *terms and conditions of access* to a *direct control service* (including a negotiable component), the *AER* may:
- (1) have regard to other matters the *AER* considers relevant; and
  - (2) hear evidence or receive submissions from *NEMMCO* about *power system security* and from *Distribution Network Users* who may be adversely affected.

*Note:*

*Section 130 of the Law requires the AER, in making an access determination, to give effect to a network revenue or pricing determination*

*applicable to the services that are the subject of the dispute even though the determination may not have been in force when the dispute arose.*

- (c) In determining an access dispute about *terms and conditions of access* to a *negotiated distribution service*, the *AER* must apply:
  - (1) in relation to price (including *access charges*), the *Negotiated Distribution Service Criteria* that are applicable to the dispute in accordance with the relevant distribution determination; and
  - (2) in relation to other terms and conditions, the *Negotiated Distribution Service Criteria* that are applicable to the dispute and Chapters 4, 5, this Chapter 6 and Chapter 7 of the *Rules*; and
  - (3) in relation to all *terms and conditions of access* (including price) the decisions of *NEMMCO* or the *AER* where those decisions relate to those terms and conditions and are made under Chapters 4, 5, this Chapter 6 and Chapter 7 of the *Rules*;

and must have regard:

- (4) to the relevant *negotiating framework* prepared by the *Distribution Network Service Provider* and approved by the *AER*.
- (d) In determining an access dispute about the *terms and conditions of access* to a *negotiated distribution service*, the *AER* may:
    - (1) have regard to other matters the *AER* considers relevant; and
    - (2) hear evidence or receive submissions from *NEMMCO* and *Distribution Network Users* notified and consulted under the *Distribution Network Service Provider's negotiating framework*.
  - (e) In determining an access dispute about *access charges*, or involving *access charges*, the *AER* must give effect to the following principle:

*Access charges* should be based on the costs reasonably incurred by the *Distribution Network Service Provider* in providing *distribution network user access* and, where they consist of compensation referred to in clause 5.5(f)(4)(ii) and (iii), on the revenue that is likely to be foregone and the costs that are likely to be incurred by a person referred to in those provisions where an event referred to in those provisions occurs.

### **6.22.3 Termination of access dispute without access determination**

- (a) If the *AER* considers that an access dispute could be effectively resolved by some means other than an access determination, the *AER* may give the

parties to the dispute notice of the alternative means of resolving the dispute.

*Example:*

*The AER might give such a notice if of the opinion that a particular dispute could be dealt with more efficiently, and with less expense, by a jurisdictional ombudsman.*

- (b) The giving of such a notice is a specified dispute termination circumstance for the purposes of section 131(3) of the Law.

*Note:*

*It follows that the AER may exercise its power to terminate the dispute without making an access determination (See section 131(1)(d) of the Law).*

## **Part M Separate disclosure of transmission and distribution charges**

### **6.23 Separate disclosure of transmission and distribution charges**

- (a) *A Distribution Customer:*
  - (1) with a *load* greater than 10MW or 40GWh per annum; or
  - (2) with *metering* equipment capable of capturing relevant *transmission* and *distribution system* usage data,

may make a request (a ***TUOS/DUOS disclosure request***) to a *Distribution Network Service Provider* to provide the *Distribution Customer* with a statement (a ***TUOS/DUOS disclosure statement***) identifying the separate components of the *transmission use of system* and *distribution use of system* charges comprised in the charges for electricity supplied to the *Distribution Customer's connection points*.

- (b) Within 10 *business days* of receipt of a *TUOS/DUOS disclosure request*, a *Distribution Network Service Provider* must notify the *Distribution Customer* of the estimated charge (including details of how the charge is calculated) for providing the *TUOS/DUOS disclosure statement*. The charge must be no greater than the reasonable costs directly incurred by the *Distribution Network Service Provider* in preparing the statement for the *Distribution Customer*.
- (c) If the *Distribution Customer* advises the *Distribution Network Service Provider* within 20 *business days* of receipt of the notice referred to in paragraph (b) that it still requires the requested *TUOS/DUOS disclosure statement*, the *Distribution Network Service Provider* must prepare the

statement and provide it to the *Distribution Customer* within 20 *business days* of being so advised. The *TUOS/DUOS disclosure statement* must include detailed information on the method used to determine the *distribution use of system* charges and the allocation of the *transmission use of system* charges to the *Distribution Customer* for electricity supplied to its *connection points*. The information must be sufficient to allow the *Distribution Customer* to assess the impact on its *network* charges of a change in its *network* use.

- (d) The *TUOS/DUOS disclosure statement* must also separately identify the amounts that have been allocated to the *Distribution Customer's connection points* under Part J of Chapter 6A in respect of each of the *categories of prescribed transmission services*, where the *Distribution Customer* requests this information.
- (e) Where the *Distribution Customer* requests the information referred to in paragraph (d), the *Distribution Network Service Provider* must separately identify the component of the charge notified under paragraph (b) that relates to the provision of the additional information.
- (f) Each *Distribution Network Service Provider* must publish information annually disclosing the *transmission use of system* and *distribution use of system* charges for each of the classes of *Distribution Customers* identified for this purpose by the *Distribution Network Service Provider*, or as required by the *AER*.

## **Schedule 6.1 Contents of building block proposals**

### **S6.1.1 Information and matters relating to capital expenditure**

A *building block proposal* must contain at least the following information and matters relating to capital expenditure:

- (1) a forecast of the required capital expenditure that complies with the requirements of clause 6.5.7 of the *Rules* and identifies the forecast capital expenditure by reference to well accepted categories such as:
  - (i) asset class (eg. *distribution lines, substations* etc); or
  - (ii) category driver (eg. *regulatory obligation or requirement, replacement, reliability, net market benefit, business support* etc),

and identifies, in respect of proposed material assets:

- (iii) the location of the proposed asset; and
- (iv) the anticipated or known cost of the proposed asset; and

- (v) the categories of *distribution services* which are to be provided by the proposed asset;
- (2) the method used for developing the capital expenditure forecast;
- (3) the forecasts of load growth relied upon to derive the capital expenditure forecasts and the method used for developing those forecasts of load growth;
- (4) the key assumptions that underlie the capital expenditure forecast;
- (5) a certification of the reasonableness of the key assumptions by the directors of the *Distribution Network Service Provider*;
- (6) capital expenditure for each of the past *regulatory years* of the previous and current *regulatory control period*, and the expected capital expenditure for each of the last two *regulatory years* of the current *regulatory control period*, categorised in the same way as for the capital expenditure forecast;
- (7) an explanation of any significant variations in the forecast capital expenditure from historical capital expenditure.

### **S6.1.2 Information and matters relating to operating expenditure**

A *building block proposal* must contain at least the following information and matters relating to operating expenditure:

- (1) a forecast of the required operating expenditure that complies with the requirements of clause 6.5.6 of the *Rules* and identifies the forecast operating expenditure by reference to well accepted categories such as:
  - (i) particular programs; or
  - (ii) types of operating expenditure (eg. maintenance, payroll, materials etc),and identifies in respect of each such category:
  - (iii) to what extent that forecast expenditure is on costs that are fixed and to what extent it is on costs that are variable; and
  - (iv) the categories of *distribution services* to which that forecast expenditure relates;
- (2) the method used for developing the operating expenditure forecast;



- (3) the forecasts of key variables relied upon to derive the operating expenditure forecast and the method used for developing those forecasts of key variables;
- (4) the method used for determining the cost associated with planned maintenance programs designed to improve the performance of the relevant *distribution system* for the purposes of any *service target performance incentive scheme* that is to apply to the *Distribution Network Service Provider* in respect of the relevant *regulatory control period*;
- (5) the key assumptions that underlie the operating expenditure forecast;
- (6) a certification of the reasonableness of the key assumptions by the directors of the *Distribution Network Service Provider*;
- (7) operating expenditure for each of the past *regulatory years* of the previous and current *regulatory control period*, and the expected operating expenditure for each of the last two *regulatory years* of the current *regulatory control period*, categorised in the same way as for the operating expenditure forecast;
- (8) an explanation of any significant variations in the forecast operating expenditure from historical operating expenditure.

### **S6.1.3 Additional information and matters**

A *building block proposal* must contain at least the following additional information and matters:

- (1) an identification and explanation of any significant interactions between the forecast capital expenditure and forecast operating expenditure programs;
- (2) a proposed pass through clause with a proposal as to the events that should be defined as *pass through events*;
- (3) a description, including relevant explanatory material, of how the *Distribution Network Service Provider* proposes the *efficiency benefit sharing scheme* should apply for the relevant *regulatory control period*;
- (4) a description, including relevant explanatory material, of how the *Distribution Network Service Provider* proposes the *service target performance incentive scheme* should apply for the relevant *regulatory control period*;

- (5) a description, including relevant explanatory material, of how the *Distribution Network Service Provider* proposes the *demand management incentive scheme* (if applicable) should apply for the relevant *regulatory control period*;
- (6) the provider's calculation of revenues or prices for the purposes of the control mechanism proposed by the provider together with:
  - (i) details of all amounts, values and inputs (including X factors) relevant to the calculation; and
  - (ii) an explanation of the calculation and the amounts, values and inputs involved in the calculation; and
  - (iii) a demonstration that the calculation and the amounts, values and inputs on which it is based comply with relevant requirements of the Law and the *Rules*;
- (7) the provider's calculation of the regulatory asset base for the relevant *distribution system* for each *regulatory year* of the relevant *regulatory control period* using the *roll forward model* referred to in clause 6.5.1 of transitional Chapter 6, together with:
  - (i) details of all amounts, values and other inputs used by the provider for that purpose; and
  - (ii) a demonstration that any such amounts, values and other inputs comply with the relevant requirements of Part C of transitional Chapter 6; and
  - (iii) an explanation of the calculation of the regulatory asset base for each *regulatory year* of the relevant *regulatory control period* and of the amounts, values and inputs referred to in subparagraph (i);
- (8) the commencement and length of the period nominated by the *Distribution Network Service Provider* for the purposes of clause 6.5.2(c)(2) of transitional Chapter 6;
- (9) the provider's calculation of the proposed rate of return;
- (10) the *post-tax revenue model* completed to show its application to the *Distribution Network Service Provider* and the completed *roll-forward model*;
- (11) the provider's estimate of the cost of corporate income tax for each *regulatory year* of the *regulatory control period*;

- (12) the depreciation schedules nominated by the *Distribution Network Service Provider* for the purposes of clause 6.5.5 of transitional Chapter 6, which categorise the relevant assets for these purposes by reference to well accepted categories such as:
- (i) asset class (eg *distribution lines* and *substations*); or
  - (ii) category driver (eg *regulatory obligation or requirement*, replacement, *reliability*, net market benefit, and business support),
- together with:
- (iii) details of all amounts, values and other inputs used by the provider to compile those depreciation schedules; and
  - (iv) a demonstration that those depreciation schedules conform with the requirements set out in clause 6.5.5(b) of transitional Chapter 6; and
  - (v) an explanation of the calculation of the amounts, values and inputs referred to in subparagraph (iii);
- (13) \*\*\*\*\*

## **Schedule 6.2 Regulatory Asset Base**

### **S6.2.1 Establishment of opening regulatory asset base for a regulatory control period**

- (a) Application of this clause

This clause S6.2.1:

- (1) applies to the establishment of the value of the regulatory asset base for a *distribution system* as at the beginning of a *regulatory control period* on the roll forward of the regulatory asset base to that *regulatory control period* from the previous *regulatory control period*; and
- (2) also applies to the establishment of the value of the regulatory asset base for a *distribution system* as at the beginning of a *regulatory control period* where the *distribution system* was not immediately before that time the subject of a *building block determination*.

- (b) Roll forward model to comply with this clause

The values to be used for completing the *roll forward model* must be established in accordance with this clause and clauses S6.2.2 and S6.2.3.

(c) Distribution systems of specific providers

- (1) In the case of a *distribution system* owned, controlled or operated by one of the following *Distribution Network Service Providers* as at the commencement of this schedule, the value of the regulatory asset base for that *distribution system* as at the beginning of that first *regulatory year* must be determined by rolling forward the regulatory asset base for that *distribution system*, as set out in the table below, in accordance with this schedule:

Jurisdiction	<i>Distribution Network Service Provider</i>	Regulatory Asset Base (\$m)
Australian Capital Territory	ActewAGL	510.54 (as at 1 July 2004 in July 2004 dollars)
New South Wales	Country Energy	2,440 (as at 1 July 2004 in July 2004 dollars)
	EnergyAustralia	4,116 (as at 1 July 2004 in July 2004 dollars); plus 635.6 (as at 1 July 2004 in July 2004 dollars) in respect of EnergyAustralia's transmission support network
	Integral Energy	2,283 (as at 1 July 2004 in July 2004 dollars)
*****	*****	*****

- (2) The values in the table above are to be adjusted for the difference between:
- (i) any estimated capital expenditure that is included in those values for any part of a previous *regulatory control period*; and
  - (ii) the actual capital expenditure for that part of the previous *regulatory control period*.

This adjustment must also remove any benefit or penalty associated with any difference between the estimated and actual capital expenditure.

- (3) When rolling forward a regulatory asset base under subparagraph (1), the *AER* must take into account the derivation of the values in the

above table from past regulatory decisions and the consequent fact that they relate only to the regulatory asset base identified in those decisions.

(d) \*\*\*\*\*

(e) Method of adjustment of value of regulatory asset base

Except as otherwise provided in paragraph (c), the value of the regulatory asset base for a *distribution system* as at the beginning of the first *regulatory year* of a *regulatory control period* must be calculated by adjusting the value (the '**previous value**') of the regulatory asset base for that *distribution system* as at the beginning of the first *regulatory year* of the immediately preceding *regulatory control period* (the '**previous control period**') as follows:

- (1) The previous value of the regulatory asset base for each NSW Distribution Network Service Provider must be increased by the amount of all capital expenditure incurred during the previous control period.
- (1A) The previous value of the regulatory asset base for the ACT Distribution Network Service Provider must be increased by the amount of the capital expenditure incurred during the previous control period that is to be included under the ICRC approach referred to in clause 6.5.1(g) of the transitional Chapter 6.
- (2) The previous value of the regulatory asset base must be increased by the amount of the estimated capital expenditure approved by the *AER* for any part of the previous control period for which actual capital expenditure is not available.
- (3) The previous value of the regulatory asset base must be adjusted for the difference between:
  - (i) the estimated capital expenditure for any part of a previous *regulatory control period* where that estimated capital expenditure has been included in that value; and
  - (ii) the actual capital expenditure for that part of the previous *regulatory control period*.

This adjustment must also remove any benefit or penalty associated with any difference between the estimated and actual capital expenditure.

- (4) The previous value of the regulatory asset base must only be increased by actual or estimated capital expenditure to the extent that all such capital expenditure is properly allocated to the provision of *standard*

*control services* in accordance with the Cost Allocation Method for the relevant *Distribution Network Service Provider*.

- (5) The previous value of the regulatory asset base for each NSW Distribution Network Service Provider must be reduced by the amount of actual depreciation of the regulatory asset base during the previous *regulatory control period*, calculated in accordance with the rates and methodologies allowed in the distribution determination for that period.
- (5A) The previous value of the regulatory asset base for the ACT Distribution Network Service Provider must be reduced by the amount of depreciation of the regulatory asset base during the previous *regulatory control period*, calculated in accordance with the distribution determination for that period.
- (6) The previous value of the regulatory asset base must be reduced by the disposal value of any asset where that asset has been disposed of during the previous *regulatory control period*.
- (7) The previous value of the regulatory asset base must be reduced by the value of an asset where the asset was previously used to provide *standard control services* (or their equivalent under the previous regulatory system) but, as a result of a change to the classification of a particular service under Part B, is not to be used for that purpose for the relevant *regulatory control period*.
- (8) The previous value of the regulatory asset base may be increased by the value of an asset to which this subparagraph applies to the extent that:
  - (i) the *AER* considers the asset to be reasonably required to achieve one or more of the *capital expenditure objectives*; and
  - (ii) the asset is properly allocated to *standard control services* in accordance with the principles and policies set out in the Cost Allocation Method for the relevant *Distribution Network Service Provider*; and
  - (iii) the value of the asset has not been otherwise recovered.

This subparagraph applies to an asset that:

- (i) was not used to provide *standard control services* (or their equivalent under the previous regulatory system) in the previous *regulatory control period* but, as a result of a change to the classification of a particular service under Part B, is to be used for that purpose for the relevant *regulatory control period*; or

- (ii) was never previously used to provide *standard control services* (or their equivalent under the previous regulatory system) but is to be used for that purpose for the relevant *regulatory control period*.
- (f) An increase or reduction in the value of the regulatory asset base under subparagraph (7) or (8) of paragraph (e) is to be based on the value of the relevant asset as shown in independently audited and published accounts.
- (g) Despite any other provision of this clause S6.2.1, the regulatory asset base for Country Energy at the beginning of the regulatory control period 2009-2014 should reflect the deferral of depreciation allowed for Country Energy in clause 7.3.2 of the IPART's Final Report (Other Paper No 23 - June 2004) relating to NSW Electricity Distribution Pricing 2004/05 to 2008/09.

## S6.2.2 \*\*\*\*\*

### S6.2.3 Roll forward of regulatory asset base within the same regulatory control period

- (a) Application of this clause

This clause applies to the establishment of the value of the regulatory asset base for a *distribution system* as at the beginning of one *regulatory year* in a *regulatory control period* on the roll forward of the regulatory asset base to that *regulatory year* from the immediately preceding *regulatory year* (if any) in that *regulatory control period*.

- (b) Roll forward model to comply with this clause

The *roll forward model* referred to in clause 6.5.1 of the *Rules* must provide for that value to be established in accordance with the requirements of this clause.

- (c) Method of adjustment of value of regulatory asset base

The value of the regulatory asset base for a *distribution system* as at the beginning of the second or a subsequent year ('the **later year**') in a *regulatory control period* must be calculated by adjusting the value ('the **previous value**') of the regulatory asset base for that *distribution system* as at the beginning of the immediately preceding *regulatory year* ('the **previous year**') in that *regulatory control period* as follows:

- (1) The previous value of the regulatory asset base must be increased by the amount of forecast capital expenditure accepted or substituted by the *AER* for the previous year in accordance with clause 6.5.7(c) or clause 6.12.1(3) (as the case may be).

- (2) The previous value of the regulatory asset base must be reduced by the amount of depreciation included in the *Distribution Network Service Provider's annual revenue requirement* for the previous year.
  - (3) The previous value of the regulatory asset base must be reduced by the disposal value of any asset included in that value where the asset is forecast to be disposed of during the previous year.
  - (4) The previous value of the regulatory asset base must be increased by an amount necessary to maintain the real value of the regulatory asset base as at the beginning of the later year by adjusting that value for inflation.
- (d) Allowance for working capital

If the *AER* determines that it is appropriate to do so, it may include an allowance for working capital in the regulatory asset base for a *distribution system* which is rolled forward in accordance with this clause.