



National Electricity Market  
Management Company Limited  
ABN 94 072 010 327  
Sydney

9 March 2006

Dr John Tamblyn  
Chairman  
Australian Energy Market Commission  
PO Box H166  
Australia Square NSW 1215

Dear John

**Submission on Draft National Electricity Amendment (System Restart Ancillary Services and pricing under market suspension) Rule 2006**

Thank you for the opportunity to make this submission on the Commission's draft Determination and draft Rule which changes the arrangements of the standards applying to, the procurement of, and payment for System Restart Ancillary Services (SRAS) and which clarifies NEMMCO's responsibilities in relation to pricing under market suspension. Apart from some minor drafting comments on the Rules in the attachment 2 NEMMCO is supportive on the pricing under market suspension proposals.

NEMMCO accepts it is the Commission's consideration that a competitive market in SRAS is more likely to develop under a new procurement process. NEMMCO believes the draft Determination would be improved by:

- clarifying if there is to be any means to manage prices if competition is slow to emerge or is limited by access;
- clarifying the role of the SRAS objective and the Reliability Panel;
- improving the transparency of the processes through information and consultation;
- reviewing discrepancies between the draft determination and the draft Rule; and
- reviewing a number of drafting issues (see Attachment 2).

The attached submission (Attachment 1) confirms NEMMCO's understanding from our meeting of 15 February and provides further detail on the above.

NEMMCO would be pleased if you could have these matters considered by the Commission. For further details, please do not hesitate to contact Stuart James (ph: 03 9648 8802).

Yours sincerely

  
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**Attachment 1: SUBMISSION****1 Short-term cost implications**

NEMMCO's original proposal sought to clarify a number of aspects of the existing acquisition process. This was intended to overcome a number of difficulties that NEMMCO has experienced where tenders were assessed to be non-competitive, particularly where the amount of service tendered was greater than required by the standard or where the price being offered was (in NEMMCO's opinion) excessive when benchmarked against estimates of the cost of providing the service plus a commercial margin.

NEMMCO notes the Energy Retailers Association of Australia's (ERAA) concern that prices for SRAS do not increase, despite the Commission's observation of the relative size of the SRAS market. In contrast, the draft determination implies in a number of areas that prices paid by NEMMCO for SRAS may be too low to encourage new entrants in the long term. NEMMCO understands that the Commission does not wish NEMMCO to exercise any discretion on the acceptability of any prices tendered by potential service providers. The Commission may wish to clarify if there is to be any means to manage prices in an environment where competitive outcomes may take a substantial time to develop or may be limited by access.

Based on previous tenders, NEMMCO believes there is potential for the short term total price paid for SRAS to be several times the current annual total of \$13 million. The Commission should also note that with new contracts expected to be for up to 6 years, the time taken for long-term benefits to appear may be considerable.

**2 Long-term value for money**

In response to the ERAA's concern about increasing prices, the Commission considered that the draft Rule should allow NEMMCO "to extract better value for money in the provision of SRAS". The draft also enables NEMMCO to enter into bilateral SRAS contracts where these represent better value for money than the competitive market.

The national electricity market objective (NEM objective) is expressed in terms of investment in and use of electricity services. NEMMCO would appreciate it if the Commission could elaborate on the 'value for money' concept in light of the NEM objective as this will assist NEMMCO in interpreting the proposed requirement on NEMMCO in the procurement of long term bilateral contracts.

**3 Bilateral SRAS contracts**

There are two matters relating to bilateral SRAS contracts that NEMMCO would like to raise:

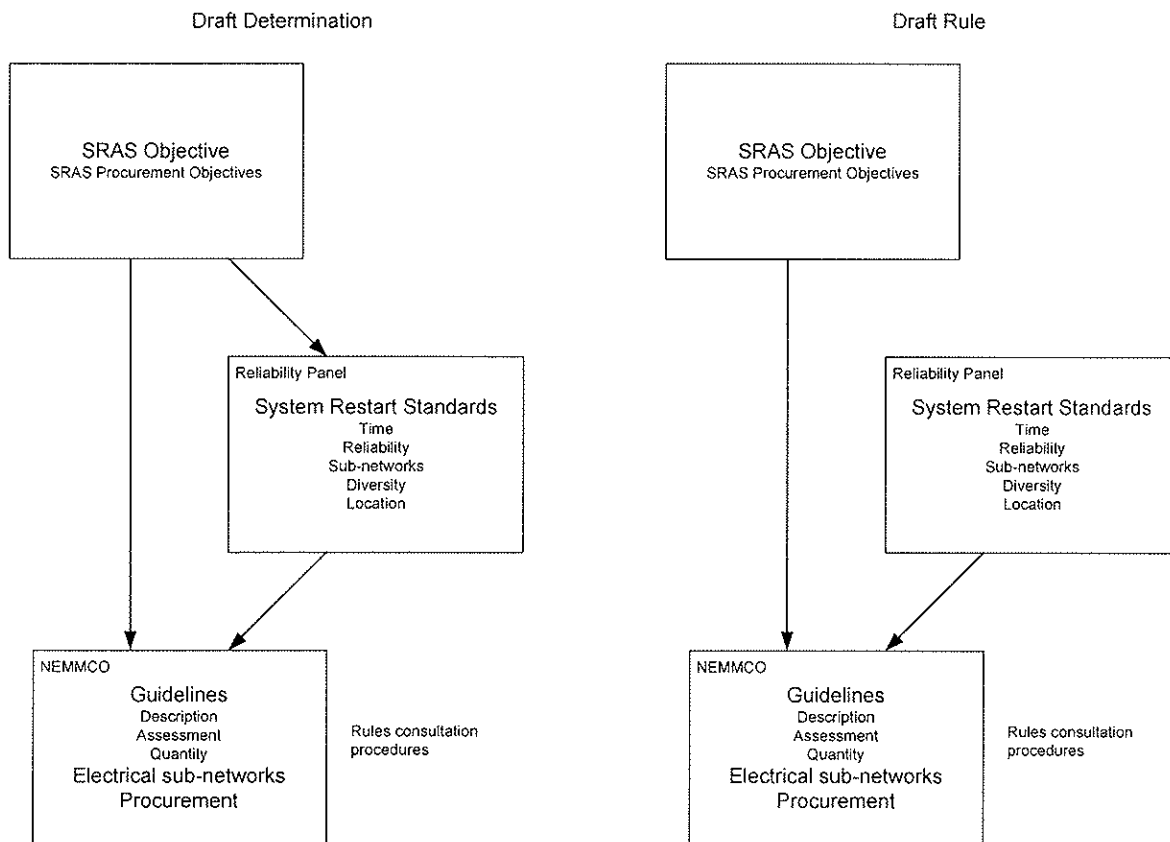
- There is a lack of detail in both the draft Determination and the draft Rule on the circumstances in which long-term bilateral SRAS contracts are appropriately used. NEMMCO understands the Commission intends that NEMMCO would enter into such contracts if it has not been able to meet the standard following the normal tendering process – clarification of this matter would be appreciated.

- The Draft Rules indicate at clause 3.11.5(m)(3) that the bilateral SRAS contract should be “consistent with the system restart standard”. NEMMCO believes that it would be more appropriate to have consistency tied to the SRAS assessment guidelines [clause 3.11.4A(e)] instead. In the absence of such a change it would appear that the requirements for modelling, testing and other analysis might not apply to bilateral SRAS contracts, but with the suggested change, both the assessment guidelines and the standard (via the guidelines) would apply.

**4 Application of the SRAS objective and the role of the Reliability Panel**

The draft determination states that the SRAS objective should provide guidance for both the Reliability Panel and NEMMCO in their responsibilities regarding SRAS, however, the draft Rule does not apply the SRAS objective to the Reliability Panel’s deliberations. NEMMCO’s understanding of the difference between the two documents is shown in Figure 1.

**Figure 1 – Application of SRAS objective in Draft Determination and Draft Rule**



The nature of the SRAS objective seems appropriate, but NEMMCO questions whether the draft Determination and draft Rules seek to apply this objective in the most effective manner. Depending on the nature of the analysis that is expected to be applied to demonstrate consistency of NEMMCO’s procurement practices with the SRAS objective, the informational requirements for such analysis may be very difficult to meet.

Specifically, NEMMCO would appreciate clarification of whether the analysis to be applied to the application of the SRAS objective is to be quantitative (if conventional benefit cost analysis is to apply) or merely qualitative.

If benefit cost analysis principles are to apply to NEMMCO's procurement process<sup>1</sup>, any assessment of the "*economic costs of a major supply disruption*" requires (at a minimum) the following information:

- assessment of the probability of a major supply disruption;
- assessment of the magnitude (MWs interrupted and for how long) of the major supply disruption; and
- assessment of the value of interrupted MWs.

Only when these parameters have been determined is it possible to balance the costs of disruption against the "*cost of supplying SRAS*". However, none of these parameters are straightforward to assess:

- **What probability of major supply disruption should apply?** The size of the sample for assessing major supply disruption probabilities (where a restart capable service is necessary) is very small<sup>2</sup>.
- **Is there some generic level of disruption that should be applied?** The amount of MWs interrupted and for how long will be a function of the location, combination and dependability of restart services deployed and the nature of the cause of the disruption.
- **Is some generic average value of interrupted load appropriate?** The value of MWs interrupted will be a function of the time of day or year and the nature of the load.

If the SRAS objective was to apply to NEMMCO's tender assessment process, NEMMCO would appreciate further guidance as to the level of analysis required – to avoid potential confusion in the future, consideration may need to be given to including such guidance in the Rules. NEMMCO would also appreciate clarification of the distinction to be made between the "*cost of supplying SRAS*" and the price to be paid for SRAS.

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<sup>1</sup> The AEMC's Draft Determination seems to draw heavily on the recommendations of the Firecone Report, which states "*the optimum level of SRAS should be determined for distinct sub-networks, based on information on both expected outage costs and the expected performance of SRAS*" [p.10.]. NEMMCO interprets the Firecone statement as requiring relatively detailed benefit cost analysis.

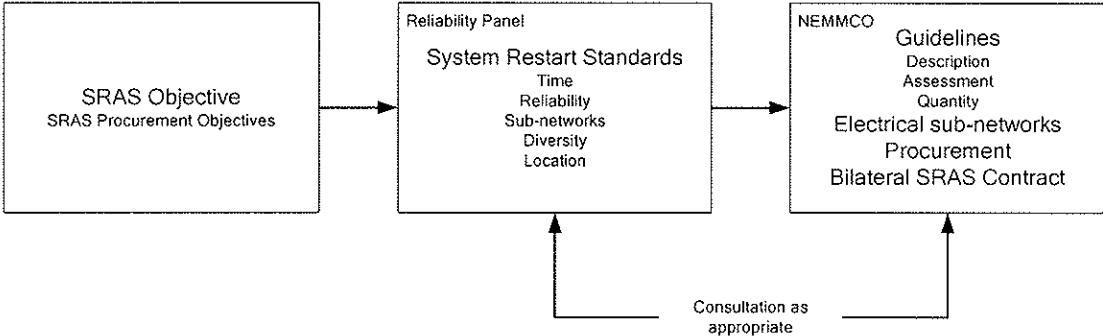
<sup>2</sup> There have been numerous major events where substantial portions of State systems suffered major disruption. Even where disruption is wide-spread, restoration can (and often does) proceed via energisation of the affected area from neighbouring surviving electrical islands, rather than necessarily relying on deployment of "black start" services.

Further, depending upon the depth of economic analysis intended, the Reliability Panel may have some difficulty in varying the *system restart standard* for economic or technical reasons – as foreshadowed by proposed Draft Rule 8.8.1(aa)(1). If strict benefit cost analysis principles were to apply<sup>3</sup>, the Reliability Panel would need to know the cost of services that would be used to meet any given standard, yet the standard needs to be set in advance of NEMMCO tendering for SRAS and hence the most appropriate service to meet that standard (and its cost) cannot be known at the time the standard is set.

In NEMMCO's view, the preferred way of implementing the proposed SRAS objective would be to have it apply directly to the Reliability Panel's deliberations on the elements of the *system restart standard*<sup>4</sup>, with broad public benefit analysis principles perhaps being used by the Panel as a way of assessing options for alternative forms of the standard. The SRAS objective would then apply indirectly to NEMMCO via the *system restart standard*.

NEMMCO's proposed application of the SRAS objective is shown in Figure 2.

**Figure 2 – Proposed application of the SRAS objective**



**5 A common standard to apply equally across the NEM**

NEMMCO accepts that a common standard applying equally across the NEM is a desirable approach. However, the Draft Rules provide for a form of variation that NEMMCO believes may be difficult for the Reliability Panel to apply. The relevant clause reads as follows:

- (aa) The *system restart standard* must:
  - (1) apply equally across all *regions*, but the *Reliability Panel* may vary the *system restart standard* between *electrical sub-networks* to the extent necessary:
    - (A) to reflect any technical system limitations or requirements; or
    - (B) if the benefits of adopting the *system restart standard* would be outweighed by the costs of implementing such a standard;

<sup>3</sup> NEMMCO notes the Firecone report statement that “the Reliability Panel to determine the optimum procurement of SRAS within sub-networks” – the suggestion being that some form of robust benefit cost analysis should apply.

<sup>4</sup> A standard that incorporates each of the features identified within the AEMC's proposed Rule clause 8.8.1(aa).

It is technically difficult for the standard to both:

- apply equally across all regions – as required by the “must”; and
- vary between sub-networks – as facilitated by the “may”.

## **6 Transparency of process and market information**

The current acquisition process is not compatible with release of extensive market information to date. Consequently, NEMMCO did not propose any additional market information beyond publishing aggregated amounts and costs. The Commission will be aware that all existing tenders and contracts are confidential and cannot be disclosed by NEMMCO.

With the adoption of a competitive market model, NEMMCO suggests that more extensive market information, similar in scope to the spot market, should be published. As a transitional measure, the Commission may also wish to consider what additional market information should be published on existing SRAS contracts as a means to bring forward the anticipated benefits of the competitive market approach.

## **7 Application of the dispute process**

Notwithstanding the comment on p.43 (point 11) of the Draft Determination that “unreasonable terms and conditions should not be grounds for dispute”, there is nothing in the proposed Rules to give effect to that principle. As NEMMCO understands it, the intention is to rule out disputes on “price” rather than ruling out dispute on any “unreasonable” term or condition.

## **8 Rule drafting issues**

Attachment 2 details some technical Rules drafting matters that the AEMC may wish to consider.

## Attachment 2: RULE DRAFTING ISSUES

[Please note there are embedded comments in this document that should be read in conjunction with marked changes.]

### [1] Clause 3.11.3

Omit clause 3.11.3 and substitute:

[Note the new 3.11.3 is the current Rule 3.11.4 with cross referencing changes]

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

(a) *NEMMCO* must use reasonable endeavours to acquire the following *non-market ancillary services* in accordance with the remaining relevant provisions of this clause 3.11:

~~(1) *NCAS*; and~~

~~(2) *system restart*;~~

(b) The requirements for services to give *NEMMCO* the capability to do the things referred to it in clause 3.11.3(a) must be met in the following ways:

(1) by *NEMMCO* setting minimum standards ~~which that~~ are to be dealt with in *Registered Participants' connection agreements* for technical performance service; or

(2) by *NEMMCO* acquiring *ancillary services* in accordance with this clause 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.~~

~~(de) *NEMMCO* must comply with the *Rules consultation procedures* when making or amending the *minimum technical ancillary service standards*.~~

~~(e) 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

**Comment [e1]:** Non-market ancillary services are already defined as such.

**Comment [e2]:** 'Which' is better used in non-restrictive clauses.

**Comment [e3]:** The meaning of this is unclear

**Comment [e4]:** Section 20 of Schedule 2 of the National Electricity Law states that a power to make an instrument includes a power to amend or repeal it. Clause 1.7.1 of the Rules extends its application to the Rules. Therefore, the explicit inclusion of a power to amend is not necessary.

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- 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*, as a whole; and
- (4) take into account the obligations imposed on parties to *connection agreements* by Chapter 5 and any applicable derogation thereto.
- (gf) 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.
- (gh) 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* in 3.11.3(e).
- (hi) NEMMCO is not responsible for payment to a *Registered Participant* for services which ~~must~~ be provided by that *Registered Participant* under a *connection agreement* or under clause 4.9.2(b).
- (ij) 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 it is a party.
- (kj) NEMMCO may instruct a *Registered Participant* to provide a service agreed to be provided under a *connection agreement* of a kind described in clause 3.11.3(b) and any *Registered Participant* so instructed must use reasonable endeavours to comply with any such instruction.

Comment [e5]: Expression

Comment [e6]: Reference to this clause is superfluous.

### [2] Clause 3.11.4

Omit clause 3.11.4 and substitute:

[Note the new rule 3.11.4 is the existing rule 3.11.3 with appropriate changes to limit it to NCAS]



**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*. Each *network control ancillary service* must enable *NEMMCO* to control the real or reactive power flow into or out of a *transmission network* in order to:
- (1) maintain the *transmission network* within its current, voltage, or stability limits following a *credible contingency event*; or
  - (2) enhance the value of *spot market* trading in conjunction with the *central dispatch* process.
- (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 value of *spot market* trading.
- ~~(c) *NEMMCO* may amend the description developed under this clause 3.11.4, from time to time.~~
- (~~c~~) *NEMMCO* must comply with the *Rules consultation procedures* when making ~~or amending~~ descriptions or procedures under this clause 3.11.4.

**Comment [e7]:** This expression is not sufficiently certain.

**[3] Clauses 3.11.4A, 3.11.4B and 3.11.4C**

After clause 3.11.4 insert:

**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 of a *major supply disruption*, taking into account the cost of supplying *SRAS*, consistent with the *NEM objective* (the "*SRAS objective*").
- (b) *NEMMCO* must use reasonable endeavours to acquire *system restart ancillary services* in accordance with the relevant provisions of this clause 3.11.4A.

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- (c) Each of the guidelines and *SRAS description* which ~~NEMMCO~~ is required to develop and *publish* in accordance with this clause 3.11.4A must:
- (1) be consistent with the *SRAS objective*;
  - (2) be designed to ensure the *system restart standard* is met; and
  - (3) be 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* in accordance with clause 8.8.3(aa)(3), 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) *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* being submitted as part of a *SRAS expression of interest* or in response to a *NMAS invitation to tender*; and
  - (3) any other analysis which *NEMMCO* considers appropriate,
- to demonstrate 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 (the "***SRAS assessment guidelines***").
- (f) *NEMMCO* must develop and *publish* guidelines for establishing 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* from time to time.~~

- (g~~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**

For the purpose of acquiring *system restart ancillary services* and determining and implementing the *system restart plan*, the ~~market power system~~ is to be divided into *electrical sub-networks*. The boundaries of the *electrical sub-networks* are to be determined from time to time by *NEMMCO* in accordance with the guidelines determined by the *Reliability Panel* under clause 8.8.3(aa)(4). *NEMMCO* must follow the *Rules consultation procedures* ~~in when~~ determining *electrical sub-networks*.

**Comment [e8]:** NEMMCO does not divide the market into electrical sub-networks, but the power system.

**3.11.4C Transitional provision for acquisition of non-market ancillary services**

- (a) All actions taken by *NEMMCO* or any *Rules body* prior to the commencement of this clause 3.11.4C (the "*NMAS commencement date*") in anticipation of the *NMAS commencement date* are ~~deemed to be valid~~ as at the *NMAS commencement date* to the extent that those actions were taken prior to the *NMAS commencement date* so far as practicable in accordance with the relevant provisions of the *Rules* (as though the relevant provisions of the *Rules* were in force at the time that the action was taken).
- (b) If *NEMMCO* has entered into an *ancillary services agreement* to acquire *non-market ancillary services* from a person prior to the *NMAS commencement date* (an "*existing NMAS contract*"), ~~then~~ *NEMMCO* may continue to acquire such *non-market ancillary services* from that person under the *existing NMAS contract* and may extend the period of the *existing NMAS contract* for such period as *NEMMCO* and that person reasonably determine.
- (c) Until the *Reliability Panel* has determined a *system restart standard* under clause 8.8.3(a)(1a), *NEMMCO* must develop and ~~publish~~ and may ~~from time to time amend~~ a *system restart standard* which ~~will~~ apply as an interim standard until such time as the *Reliability Panel* develops and *publishes* a final *system restart standard*.

**Comment [e9]:** This does not appear to be the correct use of the concept of 'deeming'.

**Comment [e10]:** The clause is already predicated on the first part, not necessary to add the 'then'.

**[4] Clause 3.11.5**

Omit clause 3.11.5 and substitute:

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

- (a) Except as provided in clauses 3.11.5(n) and 4.8.9, if *NEMMCO* wishes to acquire a *non-market ancillary service*, then *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) any requirement for persons submitting an *NMAS expression of interest* to have the relevant *facility* tested in accordance with the *NMAS assessment guidelines*;
  - (3) any 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;
  - (4) the time frames over which *NEMMCO's* assessment of *NMAS tenders* and physical testing of selected *non-market ancillary services* will occur;
  - (5) the period for which each *non-market ancillary service* would be contracted;
  - (6) any requirement for tenderers 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*;
  - (7) the minimum terms and conditions of the *ancillary services agreement* successful tenderers would be expected to enter into with *NEMMCO*;
  - (8) the principles which *NEMMCO* must adopt in assessing *NMAS tenders*; and

**Comment [e11]:** This term is not defined. Do you mean the 'NMA tender guidelines'?

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- (9) any other matter considered appropriate by *NEMMCO*.
- (c) ~~*NEMMCO* may amend the *NMAS tender guidelines* from time to time.~~ *NEMMCO* 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 prospective tenderers in respect of issues which the *NMAS tender guidelines* require prospective tenderers to discuss and, if possible, resolve with *Network Service Providers*; and
  - (2) participate in, or facilitate, testing of a *system restart ancillary service* which is 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 prospective tenderer all reasonable costs incurred by the *Network Service Provider* and for such purposes the activities of the *Network Service Provider* will be treated as *excluded 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*, then *NEMMCO* and the *Registered Participant* must negotiate in good faith concerning that aspect.
- (h) Subject to clause 3.11.5(i), *NEMMCO* must not acquire *non-market ancillary services* from any person who is not a *Registered Participant*.
- (i) *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*.
- (j) If *NEMMCO* calls for offers under clause 3.11.5(a) in respect of a kind of *non market ancillary service*, then *NEMMCO* must notify

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*Registered Participants* when it believes that it has available, under *ancillary services agreements*, a sufficient quantity of that kind of *non market ancillary service* (as determined by applying the procedure developed under clause 3.11.4 or clause 3.11.4A(f) (whichever is relevant)).

**Comment [e12]:** Clause 3.11.4A(f) refers to guidelines, not a procedure.

- (k) Within 5 *business days* of *NEMMCO* giving a notice under clause 3.11.5(j), *NEMMCO* must *publish* the total quantity of each kind of *non market ancillary service* acquired by *NEMMCO* pursuant to under *ancillary services agreements* under this clause 3.11.5.
- (l) 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*.
- (m) *NEMMCO* may acquire a *system restart ancillary service* under an *ancillary services agreement* (a "*bilateral SRAS contract*") entered into with a *Registered Participant* without following the *NMAS tender process* where:
  - (1) in *NEMMCO's* opinion, acting reasonably, the *bilateral SRAS contract* would provide better value for money than could be obtained through the tender process being conducted under the *NMAS tender guidelines* at the time the *bilateral SRAS contract* is entered into;
  - (2) the period of the *bilateral SRAS contract* is for a longer period than the period of the contracts being offered by *NEMMCO* in accordance with the tender process being conducted under the *NMAS tender guidelines* at the time the *bilateral SRAS contract* is entered into; and
  - (3) the *bilateral SRAS contract* is consistent with the *system restart standard*.
- (n) Any dispute concerning any aspect of an *ancillary services agreement* or a tender conducted by *NEMMCO* for the acquisition of *non-market ancillary services* must be dealt with in accordance with clause 8.2.

**Comment [e13]:** All of *NEMMCO's* ancillary services contracts are bilateral. Is there a better term to describe these longer term contracts?

### [5] **Clause 3.14.5**

Omit clause 3.14.5 and substitute:

#### **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, the

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procedures for *PASA*, *dispatch* and *spot price* and *ancillary service price* determination are to be followed in accordance with the provisions of the *Rules*, subject to the application of this 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 this 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 clauses 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 clauses 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 clauses 3.8 and 3.9; and
  - (4) *local market ancillary service requirements* do not apply in the *suspended region*,then *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 clauses 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 principles 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

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- (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 ~~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 clauses 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);
- (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:

**Comment [e14]:** If this is stating that this applies at any time, the use of the 'on' would appear superfluous.



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- (A) *dispatch* and the determination of *spot prices* and *ancillary service prices* is being effected in accordance ———with clauses 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 3.8, 3.9, 3.14.5(e) or 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 prices methodology and ~~which that~~ set out *NEMMCO's* reasonable estimate of typical *market* prices during periods in which the *spot market* is suspended; and
    - (2) *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*. *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 this 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.

- (n) *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*.

**[6] Clause 4.2.6(e)**

Omit clause 4.2.6(e) and substitute:

- (e) Sufficient *system restart ancillary services* should be available in accordance with the *system restart standard* so as to allow the restoration of *power system security* and any necessary restarting of *generating units* following a *major supply disruption*.

**[7] Clause 4.3.1**

Omit clause 4.3.1(p) and substitute:

- (p) to procure adequate *system restart ancillary services* in accordance with clause 3.11.4A to enable *NEMMCO* to coordinate a response to a *major supply disruption*;

**[8] Clause 4.8.3**

Omit clause 4.8.3(b) and substitute:

- (b) Without limitation, such circumstances may include:
  - (1) electricity *supply* capacity shortfall, being a condition where there are insufficient *generation* or *supply* options available to securely *supply* the total load in a *region*;
  - (2) unexpected disruption of *power system security*, which may occur when:
    - (i) an unanticipated major *power system* or *generation plant contingency event* occurs; or

- (ii) significant environmental or similar conditions, including weather, storms or fires, are likely to, or are affecting, the *power system*; or
- (3) a *major supply disruption*.

**[9] Clause 4.8.12**

Omit clause 4.8.12 and substitute:

**4.8.12 System restart plan and local black system procedures**

- (a) ~~NEMMCO must prepare and may from time to time amend~~ a *system restart plan* for the purpose of managing and coordinating system restoration activities during any *major supply disruption*.
- (b) The *system restart plan* is *confidential information*.
- (c) The *system restart plan* must be consistent with the *system restart standard*.
- (d) Each *Generator* and *Network Service Provider* must develop *local black system procedures* in accordance with the guidelines established ~~in accordance with~~ under clause 4.8.12(e). A *Generator's* or ~~Market-Network Service Provider's~~ *local black system procedures* must be consistent with any *ancillary services agreement* to provide *system restart ancillary services* to which that *Generator* or ~~Market-Network Service Provider~~ is a party. On request from *NEMMCO*, or as a result of a significant change of circumstances, a *Generator* or *Network Service Provider* must review, and amend if appropriate, its *local black system procedures*.
- (e) Subject to clause 4.8.12(f), *NEMMCO* must develop and *publish*; ~~and may from time to time amend~~; guidelines for the preparation of *local black system procedures* in consultation with *Generators* and *Network Service Providers*.
- (f) *Local black system procedures* must:
  - (1) provide sufficient information to enable *NEMMCO* to understand the likely condition and capabilities of *plant* following any *major supply disruption* such that *NEMMCO* is able to effectively coordinate the safe implementation of the *system restart plan*; and

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- (2) appropriately incorporate any relevant *energy support arrangements* to which a *Generator or Network Service Provider* may be party.
- (g) Each *Generator* and *Network Service Provider* must submit its *local black system procedures*, including any amendments to those procedures, to *NEMMCO* for approval. In considering whether to approve ~~*local black system procedures* or amendments to such procedures~~ these, *NEMMCO* will take into account the consistency of the *local black system procedures* with:
  - (1) the guidelines established in accordance with clause 4.8.12(e); and
  - (2) relevant components of the *system restart plan*.
- (h) *NEMMCO* may request amendments to *local black system procedures*, including, without limitation, imposing conditions in respect of any *energy support arrangement* as *NEMMCO* reasonably considers necessary to ensure the integrity of the *system restart plan*. When requesting amendments to the *local black system procedures*, *NEMMCO* must provide reasons for those requested amendments.
- (i) Requests by *NEMMCO* for amendments under clause 4.8.12(h) must be by notice in writing to a *Generator or Network Service Provider*. Reasonable requests by *NEMMCO* for amendments under clause 4.8.12(h) must be complied with by a *Generator or Network Service Provider*.
- (j) *NEMMCO* and *Network Service Providers* must jointly develop communication protocols to facilitate the exchange of all information relevant to the roles played by *NEMMCO*, *Network Service Providers*, *Generators* and *Customers* in the implementation of the *system restart plan*.

**[10] Clause 4.8.13**

Omit clause 4.8.13.

**[11] Clause 4.8.14**

Omit clause 4.8.14 and substitute:

**4.8.14 Power system restoration**

- (a) *NEMMCO* must notify a *Registered Participant* if, in *NEMMCO's* reasonable opinion, there is a *major supply*

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*disruption which ~~that~~ is affecting, or which may affect, that Registered Participant.*

- (b) If NEMMCO advises a *Generator* or *Network Service Provider* of a *major supply disruption*, or if the terms of the relevant *local black system procedures* require the *Generator* or *Network Service Provider* to take action, then the *Generator* or *Network Service Provider* must comply with the requirements of the *local black system procedures* as quickly as it is reasonably able to comply.
- (c) Where in NEMMCO's reasonable opinion the *system restart plan* cannot be implemented to effectively ameliorate the actual *power system* conditions created by a *major supply disruption*, NEMMCO may adapt or vary the *system restart plan* as it considers reasonably necessary to suit those actual *power system* conditions.
- (d) If there is a *major supply disruption*, a *Generator* or *Network Service Provider* must comply with NEMMCO's *directions or clause 4.8.9 instructions, respectively*, under clause 4.8.9 regarding the restoration of the *power system*.
- (e) If there is a *major supply disruption*, a *Market Customer* must comply with NEMMCO's *directions* under clause 4.8.9 with respect to the timing and magnitude of *load* restoration.

### [12] **Clause 8.8.1**

After clause 8.8.1(a)(1) insert:

- (1a) on the advice of NEMMCO determine the *system restart standard*;

### [13] **Clause 8.8.3**

After clause 8.8.3(a)(1) insert:

- (1a) the *system restart standard*;

### [14] **Clause 8.8.3(aa)**

After clause 8.8.3(a) insert:

- (aa) The *system restart standard* must:

- (1) apply equally across all *regions*, but the *Reliability Panel* may vary the *system restart standard* between *electrical sub-networks* to the extent necessary:
  - (A) to reflect any technical system limitations or requirements; or
  - (B) if the benefits of adopting the *system restart standard* would be outweighed by the costs of implementing such a standard;
- (2) identify the maximum amount of time within which *system restart ancillary services* are required to restore service to a particular level;
- (3) include guidelines on the required reliability of *primary restart services* and *secondary restart services*;
- (4) include guidelines to be followed by *NEMMCO* in determining *electrical sub-networks*, including in relation to determining the appropriate number of *electrical sub-networks* and the characteristics required within an *electrical sub-network* (such as the amount of generation or load, or electrical distance between groups of generators/generation centres, within an *electrical sub-network*);
- (5) include guidelines specifying the diversity and strategic locations required of *primary restart services* and *secondary restart services*;

**Comment [e15]:** It is not clear as to which service is being referred to.

**[15] Clause 8.8.3(b)**

Omit clause 8.8.3(b) and substitute:

- (b) At least once each calendar year and at such other times as the *AEMC* may request, the *Reliability Panel* must conduct a review of the performance of the market in terms of reliability of the power system, the power system security and reliability standards, the *system restart standard*, the guidelines referred to in clause 8.8.1(a)(3) and the policies and guidelines referred to in clause 8.8.1(a)(4) in accordance with this clause 8.8.3.

**[16] Chapter 10 – New definitions**

In Chapter 10 insert the following new definitions in alphabetical order:

*bilateral SRAS contract*

Has the meaning given in clause 3.11.5(m).

***electrical sub-network***

A part of the *national grid* determined by NEMMCO under clause 3.11.4B ~~in accordance with the guidelines determined by the Reliability Panel under clause 8.8.3(aa)(4).~~

**Comment [e16]:** This is a substantive provision and should be in the substance of the Rule not in the definition.

***energy support arrangement***

A contractual arrangement between ~~NEMMCO~~ 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 *SRAS* are used to assist *supply* to a customer during a *major supply disruption* affecting that customer, ~~or customers generally in the participating jurisdiction, as the case may be.~~

**Comment [e17]:** NEMMCO does not enter into such arrangements.

**Comment [e18]:** The reference to 'participating jurisdiction' above makes this sentence appear incomplete if it only refers to a 'customer'.

***existing NMAS contract***

Has the meaning given in clause 3.11.4C(b)

***major supply disruption***

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

***NEM objective***

Has the meaning given in section 7 of the *National Electricity Law*.

***NMAS commencement date***

Has the meaning set out in clause 3.11.4C(a).

***NMAS invitation to tender***

In respect of *non-market ancillary services*, a document issued by NEMMCO calling for *NMAS tenders* in accordance with clause 3.11.5(a).

***NMAS tender***

An offer submitted by a person in response to an *NMAS invitation to tender*.

***NMAS tender guidelines***

The guidelines determined in accordance with clause 3.11.5(b), ~~which may comprise separate guidelines in respect of:~~

- (a) ~~network control ancillary services;~~ and
- (b) ~~system restart ancillary services.~~

**Comment [e19]:** This appears to be superfluous and repetitive.

## ***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) in accordance with the guidelines determined by the *Reliability Panel* under clause 8.8.3(aa)(3).

## ***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) in accordance with the guidelines determined by the *Reliability Panel* under with clause 8.8.3(aa)(3).

## ***SRAS assessment guidelines***

The guidelines determined and published by *NEMMCO* in accordance with clause 3.11.4A(e).

## ***SRAS description***

Has the meaning given in clause 3.11.4A(d).

## ***SRAS expression of interest***

The response to a call by *NEMMCO* in accordance with clause 3.11.5, for expressions of interest to provide *system restart ancillary services*.

## ***SRAS objective***

The objective set out in clause 3.11.4A(a).

## ***SRAS procurement objectives***

The objectives set out in clause 3.11.4A(c).

## ***SRAS quantity guidelines***

The guidelines developed and published by *NEMMCO* in accordance with clause 3.11.4A(f).

***suspended region*** means a region in which the spot market is suspended in accordance with clause 3.14.3(a).

## ***system restart ancillary service or SRAS***

A service provided by *facilities* with *black start capability* which ~~that~~ 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***

Until it is replaced, the interim standard as determined by *NEMMCO* in accordance with clause 3.11.4C(c), and thereafter its replacement being 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*.

**[17] Chapter 10 – Deleted definitions**

Delete the following definitions:

***black start-up facilities***

***system restart***

**[18] Chapter 10 – Replaced definitions**

Delete the current corresponding definitions and replace them with the following definitions:

***black start capability***

A capability ~~which~~ 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.

***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*.

***network control ancillary services or NCAS***

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.

***non-market ancillary services***

*Network control ancillary services* and *system restart ancillary services*.

***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*.