

National Electricity Amendment (Network Support and Control Ancillary Services) Rule 2011 No. 2

under the National Electricity Law as applied by:

- (a) the National Electricity (South Australia) Act 1996;
- (b) the Electricity (National Scheme) Act 1997 of the Australian Capital Territory;
- (c) the Electricity National Scheme (Queensland) Act 1997 of Queensland;
- (d) the Electricity National Scheme (Tasmania) Act 1999 of Tasmania;
- (e) the National Electricity (New South Wales) Act 1997 of New South Wales:
- (f) the National Electricity (Victoria) Act 2005 of Victoria; and
- (g) the Australian Energy Market Act 2004 of the Commonwealth.

The Australian Energy Market Commission makes the following Rule under the National Electricity Law.

John Pierce Chairman Australian Energy Market Commission

National Electricity Amendment (Network Support and Control Ancillary Services) Rule 2011 No. 2

1 Title of Rule

This Rule is the *National Electricity Amendment (Network Support and Control Ancillary Services) Rule 2011 No.2.*

2 Commencement

This Rule commences operation on 5 April 2012.

3 Amendment of the National Electricity Rules

The National Electricity Rules are amended as set out in Schedule 1.

4 Amendment of the National Electricity Rules

The National Electricity Rules are amended as set out in Schedule 2.

5 Savings and Transitional Amendments to the National Electricity Rules

The National Electricity Rules are amended as set out in Schedule 3.

Schedule 1 Amendments of the National Electricity Rules

(Clause 3)

[1] Clause 2A.2.5 Alternative congestion management options

In clause 2A.2.5(b)(3), omit "such as *network* support agreements or *network control* ancillary services agreements" and substitute "for the provision of *network support* and control ancillary services".

[2] Clause 3.1.4 Market design principles

Omit clause 3.1.4(a)(7) and substitute:

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

[3] Clause 3.1.4 Market design principles

In clause 3.1.4(a)(8), omit "national electricity market" and substitute "NEM".

[4] Clause 3.1.4 Market design principles

In clause 3.1.4(a)(9), omit "dispatch or procure" and substitute "acquire".

[5] Clause 3.1.4 Market design principles

Omit clauses 3.1.4(a1) and (a2), and substitute in each case "[Deleted]".

[6] Clause 3.2.4 Ancillary services function

In the clause heading, omit "Ancillary" and substitute "Non-market ancillary".

[7] Clause 3.2.4 Ancillary services function

In clause 3.2.4(b), omit "ensure adequate *non-market ancillary services* are available" and substitute "acquire *non-market ancillary services*".

[8] Clause 3.11.1 Introduction

In clause 3.11.1(b), omit "which are".

[9] Clause 3.11.1 Introduction

Omit clause 3.11.1(c) and substitute:

(c) *Non-market ancillary services* are *ancillary services* not acquired by *AEMO* as part of the *spot market*, but acquired:

- (1) in the case of *SRAS*, by *AEMO* under *ancillary services agreements* entered into following a call for offers made in accordance with clause 3.11.5, with the prices for *SRAS* being determined in accordance with the relevant *ancillary services agreements*; and
- (2) in the case of *NSCAS*:
 - (i) by Transmission Network Service Providers under connection agreements or network support agreements to meet an NSCAS need; and
 - (ii) in the circumstances contemplated in clause 3.11.3(c), by *AEMO* under *ancillary services agreements* entered into following a call for offers made in accordance with rule 3.11 to meet a *NSCAS gap* only for *power system security* and reliability of *supply* of the *transmission network* in accordance with the *power system security and reliability standards*,

with the prices for *NSCAS* being determined in accordance with the relevant agreements;

(3) in the case of *NMAS* other than *SRAS* and *NSCAS*, by *Transmission Network Service Providers* under *connection agreements* or *network support agreements* to meet the service standards in accordance with the technical requirements of schedule 5.1 or in *applicable regulatory instruments*, with the prices for those services being determined in accordance with the relevant agreements.

[10] Clause 3.11.1 Introduction

After clause 3.11.1(c), insert:

- (d) AEMO may instruct a person to provide a non-market ancillary service under an ancillary services agreement or otherwise in accordance with the relevant performance standards, and any person so instructed must use reasonable endeavours to comply with that instruction.
- (e) AEMO is not responsible for payment to a person for non-market ancillary services provided by that person under a connection agreement or a network support agreement.

[11] Clause 3.11.3 Acquisition of non-market ancillary services

Omit the clause heading and substitute "Acquisition of Network Support and Control Ancillary Services".

[12] Clause 3.11.3 Acquisition of non-market ancillary services

Omit clauses 3.11.3(a) to (c), and substitute:

- (a) Where an *NTNDP* identifies an *NSCAS gap*, *AEMO* may request the relevant *Transmission Network Service Provider* to advise when the *Transmission Network Service Provider* will have arrangements in place to meet that *NSCAS gap*, or provide reasons why the *NSCAS gap* will not be met.
- (b) Within 30 days of *AEMO's* request under paragraph (a), the *Transmission Network Service Provider* must provide a response to *AEMO*. If the *Transmission Network Service Provider* proposes to put in place arrangements to meet the relevant *NSCAS gap*, it must include in its response full details of those arrangements.
- (c) If, after considering any response made under paragraph (b), AEMO:
 - (1) considers that the relevant NSCAS gap will remain; and
 - (2) considers it is necessary to acquire NSCAS to meet the relevant NSCAS gap to prevent an adverse impact on power system security and reliability of supply of the transmission network in accordance with the power system security and reliability standards,

AEMO:

- (3) must *publish* details of why it considers that the relevant *NSCAS gap* will remain; and
- (4) must use reasonable endeavours to acquire *NSCAS* to meet the relevant *NSCAS gap* in accordance with clause 3.11.5.

[13] Clause 3.11.3 Acquisition of non-market ancillary services

Omit clauses 3.11.3(d) to (k), and substitute in each case "[**Deleted**]".

[14] Clause 3.11.4 Procedure for determining quantities of network control ancillary services

Omit the clause heading and substitute "Guidelines and objectives for acquisition of network support and control ancillary services".

[15] Clause 3.11.4 Procedure for determining quantities of network control ancillary services

Omit clauses 3.11.4(a) and (b), and substitute:

(a) In this clause:

NSCAS description means a detailed description of each type of *network support and control ancillary service*.

NSCAS quantity procedure means a procedure that determines the location and quantity of each type of *network support and control ancillary service* required.

- (a1) *AEMO* must develop and *publish* the NSCAS description in accordance with the *Rules consultation procedures*.
- (b) *AEMO* must develop and *publish* the NSCAS quantity procedure in accordance with the *Rules consultation procedures*.

[16] Clause 3.11.4 Procedure for determining quantities of network control ancillary services

In clause 3.11.4(c), omit "description developed under clause 3.11.4(a) and the procedure referred to in clause 3.11.4(b)" and substitute "NSCAS description and the NSCAS quantity procedure".

[17] Clause 3.11.4 Procedure for determining quantities of network control ancillary services

In clause 3.11.4(d), omit "descriptions or procedures under clause 3.11.4" and substitute "the NSCAS description or the NSCAS quantity procedure".

[18] Clause 3.11.4 Procedure for determining quantities of network control ancillary services

After clause 3.11.4(d), insert:

(e) *AEMO* may make minor and administrative amendments to the NSCAS description or the NSCAS quantity procedure without complying with the *Rules consultation procedures*.

[19] Clause 3.11.5 Tender process for non-market ancillary services

Omit clauses 3.11.5(a) to 3.11.5(d), and substitute:

(a) In this clause:

NMAS tender guidelines means the guidelines developed and *published* by *AEMO* in accordance with clause 3.11.5(b) as in force from time to time, and includes amendments made in accordance with clauses 3.11.5(c) and 3.11.5(c1).

(a1) If AEMO proposes to acquire a non-market ancillary service, AEMO must call for offers from persons who are in a position to provide

- the *non-market ancillary service* in accordance with the NMAS tender guidelines.
- (b) AEMO must determine and publish the NMAS tender guidelines. Separate NMAS tender guidelines may be prepared in respect of network support and control ancillary services and system restart ancillary services. The NMAS tender guidelines must contain the following:
 - (1) a requirement for *AEMO* 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 support* and 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 *non-market ancillary services* proposed by a prospective tenderer;
 - (5) the timeframes over which *AEMO's* assessment of *NMAS* expressions of interest, *NMAS* tenders and physical testing of selected *non-market ancillary services* will occur;

(6) [Deleted]

- (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 terms and conditions of the *ancillary services agreement* that a successful tenderer would be expected to enter into with *AEMO*;
- (9) the principles *AEMO* will apply in assessing *NMAS* expressions of interest and *NMAS* tenders; and

- (10) any other matter considered appropriate by AEMO.
- (c) *AEMO* may amend the NMAS tender guidelines, and must comply with the *Rules consultation procedures* when making or amending the NMAS tender guidelines.
- (c1) *AEMO* may make minor and administrative amendments to the NMAS tender guidelines without complying with the *Rules* consultation procedures.
- (d) [Deleted]

[20] Clause 3.11.5 Tender process for non-market ancillary services

In clause 3.11.5(f)(1), omit "NMAS tender guidelines" and substitute "NMAS tender guidelines".

[21] Clause 3.11.5 Tender process for non-market ancillary services

Omit clauses 3.11.5(f)(2) to 3.11.5(o), and substitute:

- (2) participate in, or facilitate, testing of a *system restart ancillary service* or a *network support and control 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 prospective tenderer all reasonable costs incurred by the *Network Service Provider* and for such purposes the activities of the *Network Service Provider* will be treated as *negotiable services*.
- (g) Where a person submits an *NMAS* tender in response to an *NMAS* invitation to tender and *AEMO* wishes to negotiate an aspect of that *NMAS* tender, *AEMO* and that person must negotiate in good faith concerning that aspect.
- (h) Where the call for offers is for the acquisition of NSCAS, in assessing any tenders submitted to meet a particular NSCAS gap, AEMO must first determine whether those tenders are competitive. The tenders submitted to meet a particular NSCAS gap will be deemed to be competitive if the quantity of NSCAS that AEMO is seeking can be supplied from the conforming tenders received by AEMO with any one conforming tender discarded or all conforming tenders from any one party discarded. If the tenders submitted to meet a particular NSCAS gap are not deemed to be competitive, AEMO and NSCAS preferred tenderers, must negotiate in good faith to agree reasonable terms and conditions for the supply of the relevant type of NSCAS, taking into account the need to:

- (1) subject to subparagraph (h)(2), so far as practicable minimise the overall cost of supply of that service; and
- (2) appropriately remunerate the providers of the relevant *NSCAS* for that service.
- (i) If AEMO and a NSCAS preferred tenderer cannot agree on the terms and conditions for the supply of a NSCAS after 21 business days from delivery to the preferred tenderer of a written notice from AEMO to negotiate, either AEMO or the preferred tenderer may refer the matter to the Adviser for the determination of a dispute as to those terms and conditions in accordance with rule 8.2.
- (j) Subject to paragraph (k), *AEMO* must only acquire *system restart* ancillary services from a person who is a *Registered Participant*.
- (k) AEMO may enter into an agreement to acquire system restart ancillary services with a person who is not a Registered Participant if that agreement includes a condition for the benefit of AEMO that no system restart ancillary services will be provided under the agreement until that person becomes a Registered Participant.
- (1) If *AEMO* calls for offers under paragraph (a), *AEMO* must give a notice to *Registered Participants* and *NMAS providers* when the tender process is complete.
- (m) Within 5 business days of AEMO giving a notice under paragraph (l), AEMO must publish the total estimated annual costs and quantities of each type of NSCAS acquired by AEMO under ancillary services agreements in respect of each region and in total and provide a breakdown of those costs and quantities relating to each facility contracted under those agreements.
- (n) Within 5 business days of AEMO giving a notice under paragraph (l), AEMO 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 *AEMO* considers appropriate, for each *electrical sub-network*; and
 - (2) the number of system restart ancillary services acquired for each electrical sub-network.
- (o) An *NMAS provider* must comply with an *ancillary services* agreement under which they provide one or more *non-market* ancillary services.

[22] Clause 3.11.5 Tender process for non-market ancillary services

In clause 3.11.5(p), omit "tender" and substitute "call for offers".

[23] Clause 3.11.6 Procedures for the dispatch of nonmarket ancillary services by AEMO

In the clause heading, omit "Procedures for the dispatch" and substitute "Dispatch".

[24] Clause 3.11.6 Procedures for the dispatch of nonmarket ancillary services by AEMO

Omit clause 3.11.6(a) and 3.11.6(b), and substitute:

- (a) For the avoidance of doubt, AEMO may dispatch NSCAS to:
 - (1) maintain *power system security* and reliability of *supply* of the *transmission network* in accordance with the *power system security and reliability standards*; and
 - (2) maintain or increase the *power transfer capability* of that *transmission network* so as to maximise the present value of net economic benefit to all those who produce, consume or transport electricity in the *market*,

but AEMO may only call for offers to acquire NSCAS to maintain power system security and reliability of supply of the transmission network in accordance with the power system security and reliability standards.

- (a1) AEMO must develop procedures for:
 - (1) dispatching each kind of non-market ancillary service; and
 - (2) reporting to *Registered Participants* and *NMAS providers*, 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 under subparagraph (a1)(1).
- (b) *AEMO* must *publish* the procedures developed under this clause 3.11.6.

[25] Clause 3.11.6 Procedures for the dispatch of nonmarket ancillary services by AEMO

Omit clause 3.11.6(d) and insert:

(d) *AEMO* must develop and *publish* guidelines for the *dispatch* of *network support and control ancillary services* to support the relevant procedure developed under subparagraph (a1)(1).

[26] Clause 3.11.6 Procedures for the dispatch of nonmarket ancillary services by AEMO

After clause 3.11.6(d), insert:

- (e) *AEMO* must comply with the *Rules consultation procedures* when making or amending the guidelines in paragraph (d).
- (f) *AEMO* may make minor and administrative amendments to the guidelines in paragraph (d) without complying with the *Rules* consultation procedures.

[27] Clause 3.13.4A Market ancillary services

After clause 3.13.4A(b), insert:

(b1) AEMO must publish annually the actual quantities and types of market ancillary services.

[28] Clause 3.13.5 Ancillary services contracting by AEMO

In clause 3.13.5(a), omit where last occurring "the" and substitute "its".

[29] Clause 3.13.5 Ancillary services contracting by AEMO

Omit clauses 3.13.5(b) and 3.13.5(c), and substitute:

- (b) AEMO must publish annually the quantities and types of non-market ancillary services covered under existing ancillary services agreements.
- (c) Information *published* under paragraph (b) must include:
 - (1) the actual costs and quantities associated with each type of *ancillary service* acquired over the preceding 12 months in respect of each *region*; and
 - (2) in the case of *NSCAS*, a breakdown of the actual costs and quantities relating to each *facility* contracted under *ancillary services agreements*.

[30] Clause 3.15.6A Ancillary service transactions

Omit clause 3.15.6A(b) and substitute:

(b) In relation to each *NMAS provider* who provides *non-market* ancillary services under an ancillary services agreement, an ancillary services transaction occurs, which results in an amount payable by *AEMO* to the *NMAS provider* determined in accordance with that agreement.

[31] Clause 3.15.6A Ancillary service transactions

After clause 3.15.6A(b), insert:

(b1) Where an amount payable by *AEMO* under paragraph (b) is not determined on a *trading interval* basis, that amount is recovered in accordance with the relevant paragraphs (c7), (c8), (d) and (e), except that a reference to *trading interval* in the calculation of RBF, AGE, AAGE, TGE, ATGE, TCE, ATCE is to be read as "the relevant period", and any other reference to *trading interval* in those paragraphs is to be read as the "relevant *billing period*".

[32] Clause 3.15.6A Ancillary service transactions

Omit clause 3.15.6A(c) and substitute "[Deleted]".

[33] Clause 3.15.6A Ancillary service transactions

After clause 3.15.6A(c), insert:

(c1) In this clause:

Regional benefit ancillary services procedures means the procedures to determine the relative benefit that each *region* is estimated to receive from the provision of *NSCAS*.

Regional benefit factors means the factors to allocate, between *regions*, the costs associated with the provision of *NSCAS* under each *ancillary services agreement* in accordance with the regional benefit ancillary services procedures.

- (c2) AEMO must recover its liabilities under ancillary services agreements for the provision of NSCAS from Market Customers in each region in accordance with paragraphs (c8) and (c9), subject to paragraph (b1).
- (c3) In the statements to be provided under clauses 3.15.14 and 3.15.15 to a *Market Customer*, *AEMO* must separately identify the portion of the total amount payable by *AEMO* in respect of the relevant *billing period* under *ancillary services agreements* for the provision of *NSCAS* that:
 - (1) benefits specific *regions* in which there is a *connection point* for which the *Market Customer* is *financially responsible* (being the *regional* amounts given by the first summated term in the paragraph (c7) formula); and
 - (2) does not benefit specific *regions* (being the amount TNSCAS_p in the paragraph (c9) formula).
- (c4) AEMO must develop and publish the regional benefit ancillary services procedures in accordance with the Rules consultation

procedures. Without limiting the matters to be included in the regional benefit ancillary services procedures, they must require *AEMO* to take into account the estimated increase for each *region* of the gross economic benefit from increased *power transfer capability* and any other relevant factors.

- (c5) Subject to paragraph (c6), *AEMO* may amend the regional benefit ancillary services procedures from time to time.
- (c6) *AEMO* may make minor and administrative amendments to the regional benefit ancillary services procedures without complying with the *Rules consultation procedures*.
- (c7) From time to time, *AEMO* must determine the regional benefit factors.
- (c8) In each *trading interval*, in relation to each *Market Customer* for each *region*, an *ancillary services* transaction occurs, which results in a *trading amount* for the *Market Customer* determined in accordance with the following formula:

•

$$AGE_{R,R}$$

$$TA_{R,R} = (\sum_{\text{for all 's'}} (TNSCAS_{R,R} \times RBF_{R,R,R})) \times ---- \times -1$$

$$AAGE_{R,R}$$

Where:

Subscript 'P' is the relevant period;

Subscript 'R' is the relevant *region*;

Subscript 'S' is the relevant *NSCAS*;

 $TA_{p,r}$ (in \$) = the *trading amount* payable by the *Market Customer* in respect of the relevant *region* and *trading interval*;

TNSCAS_{s,p} the total amount payable by *AEMO* for the provision of the relevant *NSCAS* under an *ancillary services agreement* in respect of the relevant *trading interval*;

RBF_{s,p,r} (number) = the latest regional benefit factor assigned to the provision of the relevant *NSCAS* under an *ancillary services agreement* in respect of the relevant *region* and *trading interval*, as determined by AEMO under paragraph (c7);

 $AGE_{p,r}$ (in MWh) = the sum of the *adjusted gross energy* figures in respect of the *Market Customer's relevant connection points* located in the *region* for the relevant *trading interval*; and

 $AAGE_{p,r}$ (in MWh) = the aggregate $AGE_{p,r}$ figures for all *Market Customers* in respect of the relevant *region* and *trading interval*.

(c9) In each *trading interval*, in relation to each *Market Customer*, an *ancillary services* transaction occurs, which results in a *trading amount* for the *Market Customer* determined in accordance with the following formula:

$$AGE_{P}$$
 $TA_{P} = TNSCAS_{P} \times \cdots \times 1$
 $AAGE_{P}$

Where:

Subscript 'P' is the relevant period;

 $TA_p(in \$)$ = the *trading amount* payable by the *Market Customer* in respect of the relevant *trading interval*;

TNSCAS_p (in \$) = the sum of all amounts payable by *AEMO* for the provision of *NSCAS* under *ancillary services agreements* in respect of the relevant *trading interval* minus the sum of the *trading amounts* calculated for all *Market Customers* in respect of all of the relevant *trading interval* under paragraph (c8);

 AGE_p (in MWh) = the sum of the *adjusted gross energy* figures in respect of all the *Market Customer's relevant connection points* for the relevant *trading interval*; and

 $AAGE_p$ (in MWh) = the aggregate AGE_p figures for all *Market Customers* in respect of the relevant *trading interval*.

(c10) *AEMO* must *publish* the regional benefit factors determined under paragraph (c7).

[34] Clause 3.15.8 Funding of compensation for directions In clause 3.15.8(f)(1), omit "(c)" and substitute "(c8), (c9)".

[35] Clause 3.15.8 Funding of compensation for directions

In clause 3.15.8(f)(2), omit "TNCASP, TSRP, TCRSP, TCLSP" and substitute "TNSCASP, TSRP, RTCRSP, RTCLSP".

[36] Clause 3.15.8 Funding of compensation for directions

In clause 3.15.8(f)(3), omit "ATCE, or ATGE" and substitute "AGE, ATCE, ATGE or AAGE".

[37] Clause 3.15.10C Intervention settlements

In clauses 3.15.10C(a)(4), 3.15.10C(b)(7)(i) and 3.15.10C(c)(3)(iii)(B), omit "TNCASP, TSRP, TCRSP, TCLSP" and substitute in each case "TNSCASP, TSRP, RTCRSP, RTCLSP".

[38] Clause 4.3.4 Network Service Providers

Omit clause 4.3.4(d) and substitute:

- (d) Each *Network Service Provider* must advise *AEMO* of any *ancillary services* or similar services provided under any *connection agreement* or *network support agreement* to which it is a party, and in respect of *network support and control ancillary services* provided under any *network support agreement* must provide to *AEMO* and update *AEMO* if there has been a material change to the information provided to *AEMO*, details of the following:
 - (1) a description of the *network support and control ancillary service*, including:
 - (i) the nature of the *network support and control ancillary service*;
 - (ii) the purpose for which the *network support and control* ancillary service has been acquired;
 - (iii) connection points at which the network support and control ancillary service is to be provided (to the extent that this information can be reasonably anticipated and provided);
 - (iv) the quantity or range of quantity of the *network support* and control ancillary service that can be provided, described in a manner relevant to the stated purpose (to the extent that this information can be reasonably anticipated and provided);
 - (v) the period of any notice that has to be given to the provider of the *network support and control ancillary service* for it to be enabled;

- (vi) the response time to any instruction for use once the *network support and control ancillary service* has been enabled; and
- (vii) the communication protocols related to the enabling and use of the *network support and control ancillary service* and the notification of changes to its availability;
- (2) the availability of the *network support and control ancillary service*, including:
 - (i) the period over which the *network support and control* ancillary service will be available;
 - (ii) any possible restrictions on the availability of the *network support and control ancillary service*; and
 - (iii) whether the *network support and control ancillary service* is available for the use of parties other than the *Network Service Provider*:
- (3) advice on any changes to the formulation of network limits to reflect the enabling or use of the *network support and control ancillary service*; and
- (4) if the *network support and control ancillary service* is to be *dispatched* by *AEMO*, the form of instructions for the *dispatch* of the *network support and control ancillary service* by *AEMO*.

[39] Clause 4.3.4 Network Service Providers

After clause 4.3.4(d), insert:

- (d1) Where NSCAS is to be acquired by the Network Service Provider, the Network Service Provider must develop, in consultation with AEMO, the arrangements for the enabling and use of the network support and control ancillary service, and those arrangements must be consistent with meeting the relevant NSCAS need.
- (d2) A Network Service Provider who enters into a network support agreement must negotiate in good faith with AEMO on the form of instructions it will provide to AEMO under paragraph (d)(4) to dispatch the network support and control ancillary service to ensure those instructions are both comprehensive and practicable for AEMO to implement in central dispatch if required.

[40] Clause 4.5.1 Power system voltage control

Omit clause 4.5.1(f) and substitute:

- (f) AEMO must use reasonable endeavours to arrange the provision of reactive power facilities and power system voltage stabilising facilities through:
 - (1) ancillary services agreements in accordance with rule 3.11; or
 - (2) negotiation and agreement with appropriate *Network Service Providers* on the use of their *networks* and the provision of *ancillary services* under *network support agreements*; or
 - (3) obligations on the part of *Registered Participants* under their connection agreements.

[41] Clause 4.9.2 Instructions to Scheduled Generators and Semi-Scheduled Generators

In clause 4.9.2(c), after "ancillary services agreement" insert ", a network support agreement".

[42] Clause 4.9.3A Ancillary services instructions

Omit clause 4.9.3A(b) and substitute:

- (b) AEMO may at any time give an instruction (a dispatch instruction) to:
 - (1) an *NMAS provider* with whom *AEMO* has an *ancillary services agreement* in relation to the provision of *non-market ancillary services* under that *ancillary services agreement* or which *AEMO* is otherwise entitled to give under that *ancillary service agreement*; or
 - (2) a *Network Service Provider* in relation to the provision of any *non-market ancillary services* or similar services provided under any *connection agreement* or *network support agreement*.

[43] Clause 4.9.3A Ancillary services instructions

Omit 4.9.3A(d) and substitute:

(d) An *NMAS provider* with whom *AEMO* has an *ancillary services* agreement must ensure that appropriate personnel or electronic facilities are available in accordance with that agreement at all times to receive and immediately act upon *dispatch instructions* issued to that *NMAS provider* by *AEMO*.

[44] Clause 4.10.2 Transmission network operations

Omit clause 4.10.2(c) and substitute:

(c) Any equipment interfacing with a *transmission network* must be operated in accordance with the requirements of Chapter 5, any applicable *connection agreement*, *ancillary services agreement*, *network support agreement* and the associated *power system operating procedures*.

[45] Clause 5.2.1 Obligations of Registered Participants

Omit clause 5.2.1(b)(2) and substitute:

(2) to comply with their *performance standards*;

[46] Clause 5.3.6 Offer to connect

Omit clause 5.3.6(c1) and substitute "[Deleted]".

[47] Clause 5.3.8 Provision and use of information

In clause 5.3.8(b)(1), omit "or similar services described in clause 3.11.3(j)".

[48] Clause 5.4.2 Advice of inconsistencies

Omit clause 5.4.2(c) and substitute " [Deleted]".

[49] Clause 5.6.2A Annual Planning Report

In clause 5.6.2A(b)(6)(v), omit "and" where lastly occurring.

[50] Clause 5.6.2A Annual Planning Report

After clause 5.6.2A(b)(6), insert:

- (6A) a summary of NSCAS capabilities provided to the transmission network in the previous year with a description of relevant NSCAS, including the proportion of such services that have been acquired by AEMO in accordance with clause 3.11.5;
- (6B) the manner in which each NSCAS gap in the Transmission Network Service Provider's region as identified in the most recent NTNDP is proposed to be addressed;
- (6C) the reasons why any NSCAS gap is not being met; and

[51] Clause 5.6.2A Annual Planning Report

After clause 5.6.2A(b), insert:

(c) If the *AEMC* raises any queries on the reasons referred to in paragraph 5.6.2A(b)(6C) with the relevant *Transmission Network Service Provider*, that *Transmission Network Service Provider* must respond to those queries within 30 days.

[52] Rule 5.6A National Transmission Planning

After the rule heading 5.6A, insert:

In this rule:

NSCAS trigger date means for any *NSCAS* gap identified in clause 5.6A.2(c)(6A)(i), the date that the *NSCAS* gap first arises.

NSCAS tender date means for any *NSCAS* gap identified in clause 5.6A.2(c)(6A)(i), the date or indicative date that *AEMO* would need to act so as to call for offers to acquire *NSCAS* to meet that *NSCAS* gap by the relevant NSCAS trigger date in accordance with clause 3.11.3(c)(4).

[53] Clause 5.6A.2 Publication of NTNDP

In clause 5.6A.2(b)(2)(iii), omit "network control ancillary services" and substitute "network support and control ancillary services".

[54] Clause 5.6A.2 Publication of NTNDP

In clause 5.6A.2(c), omit "published" and substitute "published".

[55] Clause 5.6A.2 Publication of NTNDP

After clause 5.6A.2(c)(2), insert:

(2A) take into account all NSCAS provided; and

[56] Clause 5.6A.2 Publication of NTNDP

After clause 5.6A.2(c)(6), insert:

- (6A) include an assessment that identifies:
 - (i) any NSCAS gap; and
 - (ii) for any NSCAS gap identified in subparagraph (i) required to maintain power system security and reliability of supply of the transmission network in accordance with the power system security and reliability standards, the relevant NSCAS trigger date;
 - (iii) for any NSCAS gap identified in subparagraph (i) required to maintain power system security and reliability of supply of the transmission network in accordance with the power system security and reliability standards, the relevant NSCAS tender date;
- (6B) report on *NSCAS* acquired by *AEMO* in the previous *NTNDP* year; and

[57] Clause 8.2.1 Application and guiding principles

Omit clause 8.2.1(a1) and substitute:

- (a1) For the purposes of this rule 8.2 only, "Registered Participant" is deemed to include not just Registered Participants but also AEMO, Connection Applicants, Metering Providers, Metering Data Providers and NMAS providers (including NSCAS preferred tenderers) who are not otherwise Registered Participants, except that this will not be the case where the term "Registered Participant":
 - (1) is used in clauses 8.2.2(b)(4), 8.2.2(d), 8.2.3(a), 8.2.3(b)(5) and 8.2.5(e); or
 - (2) first occurs in clauses 8.2.3(b), 8.2.3(b)(3), 8.2.3(b)(4) or 8.2.3(c); or
 - (3) last occurs in clauses 8.2.4(a) or 8.2.9(c).

[58] Chapter 8A Expired derogation

Omit Part 12 of Chapter 8A in its entirety, including the Part heading, and substitute "[Deleted]".

[59] Rule 11.12 Rules consequent on making of the National Electricity Amendment (Efficient Dispatch of Regulation Services) Rule 2007

Omit rule 11.12 in its entirety, including the Rule heading, and substitute "[Deleted]".

Schedule 2 Amendments of the National Electricity Rules

(Clause 4)

[1] Chapter 10 Deleted definitions

In Chapter 10, omit the following definitions:

minimum technical ancillary service standards

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

NCAS

A network control ancillary service.

network control ancillary service

A service identified in clause 3.11.4(a) which provides *AEMO* 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.

NMAS

A non-market ancillary service.

non-market ancillary service

Network control ancillary services and system restart ancillary services.

SRAS

A system restart ancillary service.

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.

[2] Chapter 10 Substituted definitions

In Chapter 10, substitute the following definitions:

ancillary services agreement

An agreement under which an *NMAS provider* agrees to provide one or more *non-market ancillary services* to *AEMO*.

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 or an instruction under an ancillary services agreement as appropriate.

dispatch instruction

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

network support agreement

An agreement under which a person agrees to provide one or more network support and control ancillary services to a Network Service Provider, including network support services to improve network capability by providing a non-network alternative to a network augmentation.

planned network event

An event which has been planned by a *Transmission Network Service Provider*, *AEMO* 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 support and control ancillary services*; and
- (d) the provision of *network support* and control ancillary services under a *network support* agreement.

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 *AEMO* to be provided under the *Rules*, but excluding those acquired by *AEMO* under rule 3.11; 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.

[3] Chapter 10 New definitions

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

network support and control ancillary service or NSCAS

A service with the capability to control the *active power* or *reactive power* flow into or out of a *transmission network* to address an *NSCAS need*.

NMAS provider

A person who agrees to provide one or more *non-market ancillary* services to AEMO under an ancillary services agreement.

non-market ancillary service or NMAS

Network support and control ancillary services, system restart ancillary services and other services acquired by Transmission Network Service

Providers under connection agreements or network support agreements to meet the service standards linked to the technical requirements of schedule 5.1 or in applicable regulatory instruments.

NSCAS gap

Any *NSCAS need* that *AEMO* forecasts will arise at any time within a planning horizon of at least 5 years from the beginning of the year in which the most recent *NTNDP* applies.

NSCAS need

Network support and control ancillary service required to:

- (a) maintain *power system security* and reliability of *supply* of the *transmission network* in accordance with the *power system security* and reliability standards; and
- (b) maintain or increase the *power transfer capability* of that *transmission network* so as to maximise the present value of net economic benefit to all those who produce, consume or transport electricity in the *market*.

NSCAS preferred tenderers

Persons that submitted tenders for *NSCAS* that are deemed to be non-competitive as selected by *AEMO* in accordance with clause 3.11.5(h).

system restart ancillary service or SRAS

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.

Schedule 3 Savings and Transitional Amendments to the National Electricity Rules

(Clause 5)

[1] Chapter 11 Savings and Transitional Rules

After rule 11.39, insert:

Part ZJ Network Support and Control Ancillary Services

11.40 Rules consequential on the making of the National Electricity Amendment (Network Support and Control Ancillary Services) Rule 2011

11.40.1 Definitions

For the purposes of this rule 11.40:

Amending Rule means the *National Electricity Amendment (Network Support and Control Ancillary Services) Rule 2011.*

Existing NCAS contract means an *ancillary services agreement* entered into between *AEMO* and a *Registered Participant* prior to the NSCAS commencement date whereby *AEMO* acquires *NCAS* from that *Registered Participant*.

NCAS means *network control ancillary services*, as that term was defined in the *Rules* immediately prior to the NSCAS commencement date.

NMAS tender guidelines has the meaning given in clause 3.11.5(a).

NSCAS commencement date means the date of the commencement of the Amending Rule.

NSCAS description has the meaning given in clause 3.11.4(a1).

NSCAS quantity procedure has the meaning given in clause 3.11.4(a1).

AEMO NSCAS Acquisition Process commencement date is 5 April 2012.

Regional benefit ancillary services procedures has the meaning given in clause 3.15.6A(c1).

11.40.2 Purpose

The purpose of this rule 11.40 is to provide transitional arrangements to facilitate *AEMO's* transition from the framework for the acquisition of *NCAS* prior to the NSCAS commencement date to the framework for the acquisition of *NSCAS* initiated under clause 3.11.3.

11.40.3 Existing NCAS contracts to continue

- (a) *AEMO* may continue to acquire *NCAS* under existing NCAS contracts and may extend the term of any existing NCAS contract for such period as is agreed between *AEMO* and each counterparty to the relevant existing NCAS contract.
- (b) After the NSCAS commencement date, an existing NCAS contract is to be regarded as an *ancillary services agreement* for the provision of *NSCAS* that does not benefit a specific *region* for the purposes of clauses 3.15.6A (c1) (c9) (including during any period that the existing NCAS contract is extended under paragraph (a)).

11.40.4 Amendments to existing guidelines

- (a) AEMO must amend the NMAS tender guidelines and the guidelines for the dispatch of network support and control ancillary services under clause 3.11.6(d) to take into account the Amending Rule with those amendments to take effect from AEMO NSCAS Acquisition Process commencement date.
- (b) Any action taken by *AEMO* prior to the AEMO NSCAS Acquisition Process commencement date for the purpose of amending the NMAS tender guidelines and the guidelines for the *dispatch* of *network support and control ancillary services* as a result of the Amending Rule is taken to satisfy any equivalent actions required under the *Rules*.

11.40.5 New procedures

- (a) *AEMO* must develop and *publish* the NSCAS description and the NSCAS quantity procedure to take into account the Amending Rule and to take effect from the NSCAS commencement date.
- (b) AEMO must develop and publish the regional benefit ancillary services procedures to take into account the Amending Rule and to take effect from the AEMO NSCAS Acquisition Process commencement date.
- (c) Any action taken by *AEMO* prior to the NSCAS commencement date for the purpose of developing the NSCAS description, NSCAS quantity procedure and the regional benefit ancillary services procedures as a result of the Amending Rule is taken to satisfy any equivalent actions required under the *Rules*.

11.40.6 Decisions and actions taken prior to Amending Rule

All decisions and actions taken by *AEMO* prior to the NSCAS commencement date in anticipation of the commencement of the Amending Rule are taken to satisfy the equivalent actions required after

the NSCAS commencement date and continue to have effect for that purpose.

[END OF RULE AS MADE]