

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 National Electricity (New South Wales) Act 1997 of New South Wales;
- (d) the Electricity National Scheme (Queensland) Act 1997 of Queensland;
- (e) the Electricity National Scheme (Tasmania) Act 1999 of Tasmania;
- (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 Tamblyn Chairman Australian Energy Market Commission

National Electricity Amendment (Ramp Rates, Market Ancillary Service Offers, and Dispatch Inflexibility) Rule 2009 No. 1

1. Title of Rule

This Rule is the National Electricity Amendment (Ramp Rates, Market Ancillary Service Offers, and Dispatch Inflexibility) Rule 2009 No. 1.

2. Commencement

This Rule commences operation on 31 March 2009.

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 consequent on the commencement of the National Electricity Amendment (Central Dispatch and Integration of Wind and Other Intermittent Generation) Rule 2008 No. 2

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

5. Notes

Notes do not form part of this Rule.

Schedule 1 Amendment of National Electricity Rules

(Clause 3)

[1] New Clause 3.8.3A Ramp rates

After clause 3.8.3, insert:

3.8.3A Ramp rates

- (a) This clause 3.8.3A applies to a *Scheduled Generator, Semi-Scheduled Generator* or *Market Participant* with *generating units, scheduled network services* and/or *scheduled loads* providing *ramp rates* to *NEMMCO* in accordance with the following clauses:
 - (1) with respect to notification of scheduled capacity prior to *dispatch*:
 - (i) clause 3.8.4(c);
 - (ii) clause 3.8.4(e);
 - (iii) clause 3.8.4(d);
 - (2) with respect to offers for *dispatch*:
 - (i) clause 3.8.6(b);
 - (ii) clause 3.8.6A(b);
 - (iii) clause 3.8.7(c); and
 - (3) with respect to *rebids*, clause 3.8.22(b).

Note: Clause 3.8.3(d) applies to this clause 3.8.3A.

- (b) Subject to clauses 3.8.3A(c) and 3.8.3A(i), a Scheduled Generator, Semi-Scheduled Generator or Market Participant to which this clause 3.8.3A applies must provide an up ramp rate and a down ramp rate to NEMMCO for each generating unit, scheduled network service and/or scheduled load that is:
 - (1) at least:
 - (i) 3MW/minute in the case of a *scheduled network service* or *scheduled load*; or

(ii) the lower of:

- (A) 3MW/minute or 3% of the registered full *load* (MW generated) in the case of a *scheduled generating unit*; or
- (B) 3MW/minute or 3% of the registered capacity in the case of a *semi-scheduled generating unit*,

provided in accordance with clause 3.13.3(b), expressed as MW/minute rounded down to the nearest whole number except where this would result in the nearest whole number being zero, in which case the up *ramp rate* and/or down *ramp rate* is deemed to be 1 MW/minute; and

- (2) at most the relevant *maximum ramp rate* provided in accordance with clause 3.13.3(b).
- (c) A Scheduled Generator, Semi-Scheduled Generator or Market Participant to which this clause 3.8.3A applies may provide a ramp rate to NEMMCO that is less than that specified in clause 3.8.3A(b)(1) if the ramp rate is affected by an event or other occurrence that:
 - (1) physically prevents the relevant *generating unit, scheduled load* or *scheduled network service* from attaining a *ramp rate* of at least that specified in clause 3.8.3A(b)(1); or
 - (2) makes it unsafe for the relevant *generating unit, scheduled load* or *scheduled network service* to operate at a *ramp rate* of at least that specified in clause 3.8.3A(b)(1),

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

- (d) If a Scheduled Generator, Semi-Scheduled Generator or Market Participant to which this clause 3.8.3A applies provides a ramp rate that is less than that specified in clause 3.8.3A(b)(1), it must provide a ramp rate to NEMMCO that is the maximum the relevant generating unit, scheduled load or scheduled network service can safely attain at that time.
- (e) If a *Scheduled Generator, Semi-Scheduled Generator* or *Market Participant* to which this clause 3.8.3A applies provides a *ramp rate* that is less than that specified in clause 3.8.3A(b)(1), it must simultaneously provide *NEMMCO* with a brief, verifiable and specific reason why the *ramp rate* is below that specified in clause 3.8.3A(b)(1).

- (f) The *AER* may require, upon written request, the *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* to provide such additional information as it may require from time to time to substantiate and verify the reason provided in clause 3.8.3A(e).
- (g) The *AER* must exercise its powers under clause 3.8.3A(f) in accordance with any guidelines issued by the *AER* from time to time in accordance with the *Rules consultation procedures*.
- (h) If a Scheduled Generator, Semi-Scheduled Generator or Market Participant to which this clause 3.8.3A applies provides a maximum ramp rate in accordance with clause 3.13.3(b) of less than that specified in clause 3.8.3A(b)(1), it must provide NEMMCO with a brief, verifiable and specific reason why the ramp rate is below that specified in clause 3.8.3A(b)(1).
- (i) Clauses 3.8.3A(b), 3.8.3A(c) and 3.8.3A(e) do not apply to a *Scheduled Generator, Semi-Scheduled Generator* or *Market Participant* to which this clause 3.8.3A applies if:
 - (1) it has provided a *maximum ramp rate* in accordance with clause 3.13.3(b) which is less than that specified in clause 3.8.3A(b)(1); and
 - (2) it has notified *NEMMCO* of this in accordance with clause 3.8.3A(h).
- (j) In addition to the obligations in clause 3.8.3A(d), if clause 3.8.3A(i) applies, the Scheduled Generator, Semi-Scheduled Generator or Market Participant must only provide ramp rates that are, at most, the maximum ramp rate for the relevant generating unit, scheduled load or scheduled network service in accordance with clause 3.13.3(b).

[2] Clause 3.8.4 Notification of scheduled capacity

In clause 3.8.4(c)(4), omit "*ramp rate constraints*", and substitute "an up *ramp rate* and a down *ramp rate*".

Note: This is a civil penalty provision.

[3] Clause 3.8.4 Notification of scheduled capacity

In clause 3.8.4(d)(3), omit "*ramp rate constraints*", and substitute "an up *ramp rate* and a down *ramp rate*".

Note: This is a civil penalty provision.

[4] Clause 3.8.4 Notification of scheduled capacity

In clause 3.8.4(e)(2), omit "*ramp rate constraints*", and substitute "an up *ramp rate* and a down *ramp rate*".

Note: This is a civil penalty provision.

[5] Clause 3.8.6A Scheduled network service offers for dispatch

In clause 3.8.6A(b)(2), omit "a MW/min *ramp rate* capability", and substitute "an up *ramp rate* and a down *ramp rate*".

[6] Clause 3.8.7 Bids for scheduled load

In clause 3.8.7(c)(2), omit "a MW/min *ramp rate* capability", and substitute "an up *ramp rate* and a down *ramp rate*".

[7] Clause 3.8.7A Market ancillary services offers

In clause 3.8.7A(j)(3), after "capability;" omit "and".

[8] Clause 3.8.7A Market ancillary services offers

In clause 3.8.7A(k), omit "." and substitute:

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

[9] Schedule 3.1 – Registered Bid and Offer Data

In the table "Scheduled Generating Unit Data", omit "normal and maximum *ramp rates*", and substitute "*maximum ramp rate*".

[10] Schedule 3.1 – Registered Bid and Offer Data

In the table "Semi-Scheduled Generating Unit Data", omit "normal and maximum *ramp rate*", and substitute "*maximum ramp rate*".

[11] Schedule 3.1 – Registered Bid and Offer Data

In the table "Scheduled Load Data", omit "normal and maximum *ramp rates*", and substitute "*maximum ramp rate*".

[12] Schedule 3.1 – Registered Bid and Offer Data

In the table "Scheduled Network Service Data", omit "normal and maximum transfer *ramp rates*", and substitute "*maximum ramp rates* for transfer".

[13] Chapter 10 New Definition

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

maximum ramp rate

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

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

[14] Chapter 10 Substituted Definition

In Chapter 10, omit the following definition and substitute:

ramp rate

The rate of change of *active power* (expressed as MW/minute) required for *dispatch*.

Schedule 2 Amendment of the National Electricity Rules consequent on the commencement of the National Electricity Amendment (Central Dispatch and Integration of Wind and Other Intermittent Generation) Rule 2008 No. 2

(Clause 4)

[1] Clause 3.8.3A Ramp rates

Omit clause 3.8.3A(a)(2) and substitute:

- (2) with respect to offers for *dispatch*:
 - (i) clause 3.8.6(b);
 - (ii) clause 3.8.6(g);
 - (iii) clause 3.8.6A(b);
 - (iv) clause 3.8.7(c); and

[2] Clause 3.8.6 Generating unit offers for dispatch

In clause 3.8.6(a)(2)(iii), omit "a MW/min *ramp rate* capability", and substitute "an up *ramp rate* and a down *ramp rate*".

[3] Clause 3.8.6 Generating unit offers for dispatch

Omit clause 3.8.6(g) and substitute:

- (g) A Semi-Scheduled Generator's dispatch offer may contain up to 10 price bands and must specify for each of the 48 trading intervals in the trading day:
 - (1) an incremental MW amount for each *price band* specified in the *dispatch offer*; and
 - (2) an up *ramp rate* and a down *ramp rate*.

[4] Clause 3.8.19 Dispatch inflexibilities

In clause 3.8.19(a), omit "If" and substitute "Subject to clause 3.8.19(a2), if".

Note: This is a civil penalty provision.

[5] Clause 3.8.19 Dispatch inflexibilities

In clause 3.8.19(a1), omit "If" and substitute "Subject to clause 3.8.19(a2), if".

[6] Clause 3.8.19 Dispatch inflexibilities

After clause 3.8.19(a1), insert:

- (a2) If clause 3.8.19(a) or clause 3.8.19(a1) applies, the *Scheduled Generator*, *Market Participant* or *Semi-Scheduled Generator*:
 - (1) must not advise *NEMMCO* that a scheduled generating unit, semi-scheduled generating unit, scheduled network service or scheduled load is inflexible under clause 3.8.19(a) or clause 3.8.19(a1) unless it reasonably expects the scheduled generating unit, semi-scheduled generating unit, scheduled network service or scheduled load to be unable to operate in accordance with dispatch instructions in any trading interval, due to abnormal plant conditions or other abnormal operating requirements in respect of that scheduled generating unit, semi-scheduled generating unit, scheduled network service or scheduled load; and
 - (2) must, as soon as practicable, advise *NEMMCO* that a *scheduled* generating unit, semi-scheduled generating unit, scheduled network service or scheduled load is not inflexible once it no longer reasonably expects the scheduled generating unit, semi-scheduled generating unit, scheduled network service or scheduled load to be unable to operate in accordance with dispatch instructions in any trading interval, due to abnormal plant conditions or other abnormal operating unit, semi-scheduled generating unit, scheduled generating unit, semi-scheduled generating unit, scheduled generating unit, semi-scheduled generating unit, semi-scheduled generating unit, scheduled generating unit, semi-scheduled generating unit, scheduled network service or scheduled load.

[7] Clause 3.8.19 Dispatch inflexibilities

In clause 3.8.19(b), after "clause 3.8.19(a)", insert "or 3.8.19(a1)".

[8] Clause 3.8.22 Rebidding

In clause 3.8.22(b), omit the first reference to "clause" and substitute "clauses 3.8.3A, 3.8.7A, 3.8.19(a) and".

[9] Clause 3.8.22 Rebidding

In clause 3.8.22(b)(1), after "ramp rates of", omit "scheduled".

[10] Clause 3.8.22A Variation of offer, bid or rebid

Omit clause 3.8.22A(a) and substitute:

(a) A Scheduled Generator, Semi-Scheduled Generator or Market Participant must make a dispatch offer, dispatch bid or rebid in relation to available capacity and daily energy constraints in good faith.

Note: This is a rebidding civil penalty provision.

END OF RULE AS MADE