

National Electricity Rules

Indicative mark up of changes proposed to be made by the draft *National Electricity Amendment (Integrating price-responsive resources into the NEM) Rule 2024*

Note:

This is an indicative version of the changes to the National Electricity Rules proposed to be made by the draft *National Electricity Amendment (Integrating price-responsive resources into the NEM) Rule 2024*. It comprises extracts from the National Electricity Rules updated to take into account changes in rules made but not yet in force.

This document is provided for information purposes only. The actual draft amendments are set out in the draft *National Electricity Amendment (Integrating price-responsive resources into the NEM) Rule 2024*.

The Australian Energy Market Commission does not guarantee the accuracy, reliability or completeness of this indicative mark-up of the National Electricity Rules.

CHAPTER 3

3. Market Rules

3.7 Projected Assessment of System Adequacy

3.7.3 Short term PASA

- (a) The *short term PASA* must be *published* at least daily by *AEMO* in accordance with the *timetable*.
- (b) The *short term PASA* covers the period of six *trading days* starting from the end of the *trading day* covered by the most recently *published pre-dispatch schedule* with a *30-minute period* resolution.
- (c) *AEMO* may *publish* additional updated versions of the *short term PASA* in the event of changes which, in the judgement of *AEMO*, are materially significant.
- (d) The following *short term PASA inputs* are to be prepared by *AEMO*:
 - (1) forecast *load* information for each *region* which is to include:
 - (i) the 10% probability of exceedence half-hourly *load* and most probable half hourly *load* on the basis of past trends, day type, and special events; and
 - (ii) all *scheduled load* and other *load* (including *wholesale demand response units*) except for *plant* classified as *scheduled load* in accordance with clause 2.3.4A(b) and *load* of *scheduled bidirectional units*,

which must subsequently be adjusted in accordance with *dispatch bids* for *scheduled load* and *dispatch bids* for *wholesale demand response units*;
 - (2) **[Deleted]**
 - (3) forecast *network constraints* known to *AEMO* at the time; and
 - (4) an *unconstrained intermittent generation forecast* for each *semi-scheduled generating unit* for each *30-minute period*.
- (e) The following *short term PASA inputs* must be submitted by each relevant *Market Participant* in accordance with the *timetable* and must represent the *Market Participant's* current intentions and best estimates:
 - (1) *available capacity* of each *scheduled generating unit*, *scheduled bidirectional unit*, *wholesale demand response unit*, *scheduled load*, or *scheduled network service* for each *30-minute period* under expected *market conditions*;

- (2) *PASA* availability of each *scheduled generating unit, scheduled bidirectional unit, wholesale demand response unit, scheduled load, or scheduled network service* for each 30-minute period;
- (3) projected daily *wholesale demand response* availability for *wholesale demand response units* that are *wholesale demand response constrained*; and
- (4) projected daily *energy* availability for *energy constrained scheduled generating units, energy constrained scheduled bidirectional units, and energy constrained scheduled loads*.

Note

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

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

Note

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

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

Note

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

- (h) *AEMO* must prepare and *publish* the following information for each 30-minute period (unless otherwise specified in subparagraphs (1) to (5)) in the period covered by the *short term PASA* in accordance with clause 3.13.4(c):
 - (1) forecasts of the most probable *load* (excluding the relevant aggregated MW allowance referred to in subparagraph (4B)) plus *reserve* requirement (as determined under clause 3.7.3(d)(2)), adjusted to make allowance for *scheduled load* and for *wholesale demand response units*, for each *region*;
 - (2) forecasts of *load* (excluding the relevant aggregated MW allowance referred to in subparagraph (4B)) for each *region* with 10% and 90% probability of exceedence;
 - (3) forecasts of the most probable *energy* (excluding the relevant aggregated MW allowance referred to in subparagraph (4B)) for each *region* and *trading day*;
 - (4) aggregate availability of *generating units* and *bidirectional units* (excluding the relevant aggregated MW allowance referred to in subparagraph (4B)) for each *region*;

- (4AA) aggregate electricity production capacity (excluding the relevant aggregated MW allowance referred to in subparagraph (4B)) for each *region*, after allowing for the impact of *network constraints*, that can be *generated* continuously, calculated by adding the following categories:
- (i) the *available capacity* of *scheduled generating units* and *scheduled bidirectional units* to produce electricity that are able to operate at the availability as notified to *AEMO* under paragraph (e)(1); and
 - (ii) the forecast *generation* of *semi-scheduled generating units* as provided by the *unconstrained intermittent generation forecasts*;
- (4AB) aggregate capacity (excluding the relevant aggregated MW allowance referred to in subparagraph (4B)) for each *region*, after allowing for the impact of *network constraints*, that cannot be *generated* continuously at the *available capacity* referred to in subparagraph (4AA)(i) due to specified daily *energy constraints*;
- (4A) aggregate *PASA availability* of *generating units* and *bidirectional units* to produce electricity (excluding the relevant aggregated MW allowance referred to in subparagraph (4B)) for each *region*;
- (4B) the aggregated MW allowance (if any) to be made by *AEMO* for *generation* from *non-scheduled generating systems* and *non-scheduled integrated resource systems* in each forecast:
- (i) of the most probable *load* referred to in clause 3.7.3(h)(1); and
 - (ii) referred to in clauses 3.7.3(h)(2), (3), (4), (4A), (4AA) and (4AB);
- (4C) in respect of each forecast:
- (i) of the most probable *load* referred to in clause 3.7.3(h)(1);
 - (ii) referred to in clauses 3.7.3(h)(2), (3), (4), (4A), (4AA) and (4AB), a value that is the sum of that forecast and the relevant aggregated MW allowance (if any) referred to in clause 3.7.3(h)(4B); and
- (5) identification and quantification of:
- (i) any projected *violations* of *power system security*;
 - (ii) any projected failure to meet the *reliability standard* as assessed in accordance with the *reliability standard implementation guidelines*;
 - (iii) **[Deleted]**
 - (iv) forecast *interconnector* transfer capabilities and the discrepancy between forecast *interconnector* transfer capabilities and the forecast capacity of the relevant *interconnector* in the absence of outages on the relevant *interconnector* only; and
 - (v) when and where *network constraints* may become binding on *dispatch*.

In subparagraph 3.7.3(h)(5)(v), omit "*dispatch*" and substitute "*the dispatch of scheduled resources*".

- (v) when and where *network constraints* may become binding on the *dispatch of scheduled resources*.

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

[ERC0332 - 31 July 2025](#)

Omit clause 3.7.3 and substitute:

- (a) In this clause 3.7.3:
 - PASA objective** has the meaning in clause 3.7.1(b).
 - ST PASA procedures** means the procedures that *AEMO* must develop and publish under paragraph (c).
- (b) The *short term PASA* covers each *30-minute period* (or such shorter period as determined by *AEMO*) in at least the seven *trading days* from and including the day of *publication*.
- (c) *AEMO* must develop and *publish*, and may amend from time to time, procedures describing:
 - (1) how *AEMO* will prepare inputs for the *short term PASA* reflecting the factors outlined in paragraph (g);
 - (2) the detailed *short term PASA* information *AEMO* will *publish* to meet the requirements of paragraph (k);
 - (3) the processes or methodologies *AEMO* will apply to produce the *short term PASA* information;
 - (4) the period to be covered by the *short term PASA* in accordance with paragraph (b); and
 - (5) any other information that *AEMO* considers reasonably necessary to implement the *PASA objective*, having regard to the costs and benefits of collecting the relevant information.
- (d) *AEMO* must comply with the *Rules consultation procedures* when making or amending the *ST PASA* procedures.
- (e) *AEMO* may make minor or administrative changes to the *ST PASA* procedures without complying with the *Rules consultation procedures*.
- (f) *AEMO*:

- (1) must *publish* the *short term PASA* at least daily in accordance with the *timetable*; and
 - (2) may *publish* additional updated versions of the *short term PASA* in the event of changes which, in the judgement of *AEMO*, are materially significant.
- (g) *AEMO* must prepare inputs for the *short term PASA* that take into account the following factors, informed by information received by *AEMO* under paragraphs (h) to (j):
- (1) forecast *load* and *unscheduled generation*, taking into account forecasting uncertainties;
 - (2) forecast availability of *scheduled resources* and *inactive voluntarily scheduled resources*, including any applicable *constraints*;
 - (3) forecast *network constraints* and notified *network outages*; and
 - (4) any other factors *AEMO* considers relevant having regard to the *PASA* objective.
- (h) Each relevant *Registered Participant* must submit the following information for the *short term PASA* in accordance with the *timetable* and the *ST PASA* procedures and must represent the *Registered Participant's* current intentions and best estimates of:
- (1) *available capacity* and *PASA availability* of each of the *Registered Participant's scheduled resources* in each relevant *30-minute period* (or such other period specified in the *ST PASA* procedures); and
 - (2) *energy constraints* or *wholesale demand response constraints* (as applicable) for *scheduled generating units*, *scheduled bidirectional units*, *voluntarily scheduled resources*, *inactive voluntarily scheduled resources*, *scheduled loads* or *wholesale demand response units*; and
 - (3) any other information set out in the *ST PASA* procedures pursuant to subparagraph 3.7.3(c)(5).
- (i) If *AEMO* considers it reasonably necessary for adequate *power system* operation and the maintenance of *power system security* and reliability of *supply*, *Registered Participants* who may otherwise be exempted from providing inputs for the *PASA* process must do so to the extent specified by *AEMO*.
- (j) *Network Service Providers* must provide to *AEMO* an outline of planned *network outages* in accordance with the *timetable* and provide to *AEMO* any other information on planned *network outages* that is reasonably requested by *AEMO* to assist *AEMO* to meet its obligations under subparagraph 3.7.3(k)(4).
- (k) *AEMO* must prepare and *publish short term PASA* information that reflects the *PASA* objective and includes for each *30-minute period* (or such other period specified in the *ST PASA* procedures) in the *short term PASA* period:
- (1) *load* forecasts at a range of probability of exceedance levels;
 - (2) forecasts of the *available capacity* of individual *scheduled resources*;

(3) forecasts of *PASA availability* of individual *scheduled generating units, scheduled bidirectional units, inactive voluntarily scheduled resources, voluntarily scheduled resources, scheduled loads, scheduled network services* and *wholesale demand response units*; and

(4) identification and quantification of:

(i) any projected *violations* of *power system security*;

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

(iii) any forecast reserve conditions under clause 4.8.4; and

(iv) when and where *network constraints* may limit the *dispatch* of *scheduled resources*.

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

[ERC0338 - 31 July 2025](#)

In clause 3.7.3(a), omit the definition of "**PASA objective**".

3.7D Demand side participation information

Definitions

(a) In this rule:

contracted demand side participation means, in relation to a *Registered Participant*, a contractual arrangement under which a person and the *Registered Participant* agree to:

(1) -the adjustment of *non-scheduled load* or the provision of unscheduled generation in certain specified circumstances, ~~or;~~

(2) -the provision of *wholesale demand response* by a *wholesale demand response unit*; ~~or;~~

(1)(3) the use of a *qualifying resource as a voluntarily scheduled resource*.

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

unscheduled generation means *generation* from the following *plant connected to a transmission system or distribution system*:

(1) a *generating system* which is not a *scheduled generating system* or *semi-scheduled generating system*; and

- (2) an *integrated resource system* which is not a *scheduled integrated resource system*.

Registered Participants to provide demand side participation information to AEMO

- (b) A *Registered Participant* must provide to *AEMO* in accordance with the demand side participation information guidelines:
 - (1) *demand side participation information*; or
 - (2) if the *Registered Participant* has no *demand side participation information* to report in respect of the relevant period, a statement to that effect.

Note

This paragraph is classified as a tier 2 civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

AEMO to report on demand side participation information

- (c) *AEMO* must *publish*, no less than annually, an analysis of volumes and types of demand response reported under paragraph (b), which must include:
 - (1) information on the types of tariffs used by *Network Service Providers* to facilitate demand response and the proportion of *retail customers* on those tariffs; and
 - (2) an analysis of trends, including year-on-year changes, in the information reported under paragraph (b), in respect of each relevant category of *Registered Participant*.
- (d) *AEMO* must *publish* details, no less than annually, on the extent to which, in general terms, *demand side participation information* received under this rule 3.7D has informed *AEMO's* development or use of *load* forecasts for the purposes of the exercise of its functions under the *Rules*.

Note

AEMO is required under clause 4.9.1(c) to take into account *demand side participation information* received under this rule 3.7D when developing *load* forecasts.

Demand side participation information guidelines

- (e) *AEMO* must develop, maintain and *publish* guidelines that specify:
 - (1) the information *Registered Participants* must provide to *AEMO* in relation to:
 - (i) *contracted demand side participation*; and
 - (ii) to the extent not covered by subparagraph (1)(i), the adjustment of *non-scheduled load* or the provision of *unscheduled generation* in response to the demand for, or price of, electricity,
which may include, but is not limited to:
 - (iii) the circumstances under which *non-scheduled load* may be adjusted or *unscheduled generation* or *wholesale demand response* may be provided;

- (iv) the location at which *non-scheduled load* may be adjusted or *unscheduled generation* or *wholesale demand response* may be provided;
 - (v) the quantity of *non-scheduled load* that may be adjusted or *unscheduled generation* or *wholesale demand response* that may be provided; and
 - (vi) historic or current information;
 - (2) when *Registered Participants* must provide and update *demand side participation information*;
 - (3) how *demand side participation information* is to be provided, including, for example:
 - (i) the format in which the information must be provided; and
 - (ii) any information *AEMO* requires to assess the accuracy of the information;
 - (4) *AEMO's* methodology for assessing the accuracy of *demand side participation information* provided to it under this rule 3.7D;
 - (4A) the requirements for a statement under paragraph (b)(2), if a *Registered Participant* has no *demand side participation information* to report; and
 - (5) the manner and form in which *AEMO* will *publish* details, in accordance with paragraph (d), on the extent to which *demand side participation information* has informed its *load* forecasts.
- (f) In developing and amending the demand side participation information guidelines, *AEMO* must:
 - (1) have regard to the reasonable costs of efficient compliance by *Registered Participants* with the guidelines compared to the likely benefits from the use of *demand side participation information* provided under this rule 3.7D in forecasting *load* for the purposes of the exercise of its functions under the *Rules*; and
 - (2) subject to paragraph (g), consult with:
 - (i) *Registered Participants*; and
 - (ii) such other persons who, in *AEMO's* reasonable opinion, have, or have identified themselves to *AEMO* as having, an interest in the demand side participation information guidelines,
in accordance with the *Rules consultation procedures*.
- (g) *AEMO* is not required to comply with the *Rules consultation procedures* when making minor or administrative amendments to the demand side participation information guidelines.
- (h) The demand side participation information guidelines must include a minimum period of 3 months between the date of *publication* and the date when the guidelines commence other than when the guidelines are amended under paragraph (g), in which case the guidelines may commence on the date of *publication*.

- (i) There must be demand side participation information guidelines in place at all times after the first demand side participation information guidelines are published by *AEMO* under the *Rules*.

3.7G Enhancing reserve information

- (a) In this rule:

battery means each of the following:

~~(1)~~ -a *scheduled bidirectional unit*, excluding a pumped hydro *production unit*; and

~~(1)(2)~~ a voluntarily scheduled resource to the extent the qualifying resource is a market bidirectional unit that is a non-scheduled bidirectional unit.

- (b) Each *Market Participant* registered under Chapter 2 of the *Rules* in respect of a battery, must continually make available to *AEMO*, in real time, the state of charge of that battery.
- (c) At the commencement of each *trading day*, *AEMO* must prepare and publish for that *trading day*, the combined total daily energy availability (in MWh) aggregated by *region* comprising:

(1) all *scheduled generating units*; ~~and~~

(2) all *scheduled bidirectional units* to the extent they comprise a pumped hydro *production unit*; and

~~(2)(3)~~ all voluntarily scheduled resources to the extent the qualifying resources are market bidirectional units that are non-scheduled bidirectional units,

that are subject to *energy constraints*.

3.8 Central Dispatch and Spot Market Operation

3.8.2 Participation in central dispatch

- (a) A *Generator* ~~or~~ *Integrated Resource Provider* or *Voluntarily Scheduled Resource Provider* must submit *dispatch bids* in respect of its *scheduled generating units*, *semi-scheduled generating units* ~~or~~ *scheduled bidirectional units* or *voluntarily scheduled resources* (as the case may be) for each *trading day* in accordance with clause 3.8.6.

Note

This paragraph is classified as a tier 2 civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

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

Note

This paragraph is classified as a tier 2 civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

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

Note

This paragraph is classified as a tier 2 civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) Subject to clause 3.8.2(d), *dispatch bids* may be submitted by *Market Participants* in respect of *scheduled loads*, in accordance with clause 3.8.7, and may specify prices and MW quantities for any *trading interval* either for reductions or increases in *load*.
- (c1) *Market ancillary service bids* may be submitted by *Ancillary Service Providers* in respect of *market ancillary services* in accordance with clause 3.8.7A.
- (d) *Dispatch bids* and *market ancillary service bids* will only be included in the *central dispatch* process by *AEMO* if it is satisfied that adequate communication and/or telemetry is available to support the issuing of *dispatch instructions* and the audit of responses.
- (e) If *AEMO* considers it reasonably necessary for adequate system operation and the maintenance of *power system security*, *Registered Participants* who may otherwise be exempted from participating in the *central dispatch* process must do so to the extent and in the capacity specified by *AEMO*.

Note

This paragraph is classified as a tier 2 civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

3.8.2B Voluntarily scheduled resource participation in central dispatch

- (a) A *Voluntarily Scheduled Resource Provider* must submit a *dispatch bid* in respect of its *voluntarily scheduled resource* (including an *inactive voluntarily scheduled resource*) for each *trading day* in accordance with clause 3.8.6 and its *VSR participation agreement*.
- (b) A *Voluntarily Scheduled Service Resource Provider* for an *inactive voluntarily scheduled resource* participates in *central dispatch* in accordance with the modifications in clauses 3.10A.2(e), (f) and (g).
- (c) A *Voluntarily Scheduled Resource Provider* for a *hibernated voluntarily scheduled resource* does not participate in *central dispatch* and is not required to submit *dispatch bids* in respect of its *hibernated voluntarily scheduled resource*.

3.8.3 Central dispatch aggregation guidelines

- (a) *Market Participants* who wish to aggregate any of their *generating units, bidirectional units, scheduled network services* or *scheduled loads* for the purpose of *central dispatch* must apply to *AEMO* to do so.
- (a1) *Market Participants* who wish to aggregate two or more *ancillary service units* so they are treated as one *ancillary service unit* for the purpose of *central dispatch*, must apply to *AEMO* to do so.
- (a2) *Demand Response Service Providers* who wish to aggregate two or more *wholesale demand response units* so they are treated as one *wholesale demand response unit* for the purpose of *central dispatch* must apply to *AEMO* to do so.

Note

Wholesale demand response units are not aggregated for the purposes of rule 3.15 and calculations under that rule even if aggregated for the purpose of central dispatch.

- (a3) *A Voluntarily Scheduled Resource Provider whose qualifying resources have been approved for nomination in accordance with clause 3.10A.1 and who wishes to aggregate two or more voluntarily scheduled resources so they are treated as one voluntarily scheduled resource for the purposes of central dispatch must apply to AEMO to do so in accordance with this clause.*

Note

~~*Wholesale demand response units are not aggregated for the purposes of rule 3.15 and calculations under that rule even if aggregated for the purpose of central dispatch.*~~

- (b) *AEMO* must approve applications for aggregation made under paragraph (a) if the following conditions are fulfilled:
 - (1) aggregated *generating units, bidirectional units* or *scheduled loads* must be:
 - (i) *connected* at a single site with the same *intra-regional loss factor* or, if two *intra-regional loss factors* are determined for the site under clause 3.6.2(b)(2), the same two *intra-regional loss factors*;
 - (ii) operated by a single *Market Participant*; and
 - (iii) the same technology type and classification and (where relevant) have similar *energy conversion models*;
 - (2) aggregated *scheduled network services* must be *connected* at the same two sites, have the same *intra-regional loss factors*, have the same *distribution loss factors* where applicable and be operated by the same *Market Participant*;
 - (3) *power system security* must not be materially affected by the proposed aggregation; and
 - (4) *control systems* such as *AGCs* must satisfy the *Rules* after aggregating.
- (b1) *AEMO* must approve applications for aggregation made under paragraph (a1) if the following conditions are fulfilled:

- (1) aggregated *ancillary service units* must be *connected* within a single *region* and be operated by a single person (whether or not in the same *Market Participant* capacity);
 - (2) *power system security* must not be materially affected by the proposed aggregation; and
 - (3) *control systems* must satisfy the requirements of clause 2.3D.1(f)(1) and (2) after aggregating.
- (b2) *AEMO* must approve applications for aggregation made under paragraph (a2) if the following conditions are fulfilled:
- (1) aggregated *wholesale demand response units* must be *connected* within a single *region* and must have been classified under clause 2.3.6 by a single person in its capacity as a *Demand Response Service Provider*;
 - (2) *power system security* must not be materially affected by the proposed aggregation;
 - (3) *control systems* must satisfy the requirements of clause 2.3.6(e) after aggregation; and
 - (4) each other requirement for aggregation in the *wholesale demand response guidelines* must have been satisfied in respect of the proposed aggregation.
- (b3) If *AEMO* approves an application for aggregation made under paragraph (a2), *AEMO* may impose on the relevant *Demand Response Service Provider* such terms and conditions as *AEMO* determines, which may include specification of the *maximum responsive component* of the aggregated *wholesale demand response units* and the circumstances in which *AEMO* may require aggregated *wholesale demand response units* to be disaggregated.
- (b4) A *Demand Response Service Provider* must comply with any conditions imposed by *AEMO* under paragraph (b3) in respect of its *wholesale demand response unit*.
- (b5) *AEMO* must approve applications for aggregation made under paragraph (a3) if the following conditions are fulfilled:
- (1) aggregated *voluntarily scheduled resources* must be *connected* within a single *region* and must be operated by a single person in its capacity as a *Voluntarily Scheduled Resource Provider*;
 - (2) *power system security* must not be materially affected by the proposed aggregation;
 - (3) each *voluntarily scheduled resource* forming part of the aggregated *voluntarily scheduled resource* must satisfy the requirements of clause 3.10A.1(f) after aggregation; and
 - (4) each other requirement for aggregation in the *voluntarily scheduled resource guidelines* must have been satisfied in respect of the proposed aggregation.
- (b6) If *AEMO* approves an application for aggregation made under paragraph (a3), *AEMO* may impose on the relevant *Voluntarily Scheduled Resource Provider* such terms and conditions as *AEMO* determines, which may include

the circumstances in which AEMO may require an aggregated voluntarily scheduled resource to be disaggregated.

- (b7) A Voluntarily Scheduled Resource Provider must comply with any conditions imposed by AEMO under paragraph (b6) in respect of its voluntarily scheduled resource.
- (c) Notwithstanding that one or more of the conditions set out in paragraph (b) may not have been fulfilled by the *Market Participant*, AEMO may approve an application for aggregation provided that such aggregation would not materially distort *central dispatch*.
- (d) Subject to paragraph (f), for the purposes of Chapter 3 (except rule 3.7B) and rule 4.9, a reference to a *generating unit*, *scheduled bidirectional unit*, *scheduled load* and *scheduled network service* is only taken as a reference to aggregated *generating units*, aggregated *bidirectional units*, aggregated *scheduled network services* and aggregated *scheduled loads* aggregated in accordance with this clause 3.8.3.
- (d1) For the purposes of Chapter 3 and rule 4.9, a reference to voluntarily scheduled resource is always taken as a reference to the aggregated voluntarily scheduled resource where it has been aggregated in accordance with this clause 3.8.3.
- (e) Except to the extent paragraph (e1) applies, AEMO must evaluate applications for aggregation and reply within 20 business days of receipt of the application setting out whether the application is to be approved and the conditions that apply to the proposed approval.
- (e1) AEMO must evaluate applications for aggregation of voluntarily scheduled resources in accordance with the process specified in the voluntarily scheduled resource guidelines.
- (f) *Market Participants* that have been granted aggregated status must, if required by AEMO, declare individual *scheduled generating unit*, *scheduled bidirectional unit*, *scheduled network service* or *scheduled load* availability and operating status to AEMO in the *PASA* under rule 3.7 to allow *power system security* to be effectively monitored.
- (f1) *Demand Response Service Providers* that have been granted aggregated status with respect to *wholesale demand response units* must, if required by AEMO, declare individual *wholesale demand response unit* availability and operating status to AEMO in the *short term PASA* process under clause 3.7.3 to allow *power system security* to be effectively monitored.
- (f2) Voluntarily Scheduled Resource Providers that have been granted aggregated status with respect to voluntarily scheduled resources must, if required by AEMO in the circumstances specified in the voluntarily scheduled resource guidelines, declare individual voluntarily scheduled resource availability and operating status to AEMO in the short term PASA process under clause 3.7.3 to allow power system security to be effectively monitored.
- (g) If a *Market Participant's* application for aggregation is denied by AEMO, AEMO must provide that applicant with reasons for that denial.

- (h) *AEMO* must maintain a database of aggregated *scheduled resources* and aggregated *ancillary service units* and their components.
- (i) For the avoidance of doubt, *semi-scheduled generating units* which are registered as a single *semi-scheduled generating unit* under clause 2.2.7 are not aggregated *semi-scheduled generating units* for the purposes of Chapter 3 and rule 4.9.

3.8.3A Ramp rates

- (a) This clause 3.8.3A applies to a *Registered Participant* who is required to provide *ramp rates* to *AEMO* for its *scheduled resource* 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 *dispatch bids*:
 - (i) clause 3.8.6(a)(2);
 - (ii) clause 3.8.6(g) and 3.8.3(g1);
 - (iii) clause 3.8.6A(b);
 - (iv) clause 3.8.7(c); and
 - (3) with respect to *rebids*, clause 3.8.22(b).
- (b) Subject to clauses 3.8.3A(c) and 3.8.3A(i), a *Market Participant* to which this clause 3.8.3A applies must provide an up *ramp rate* and a down *ramp rate* to *AEMO* for each *generating unit*, *scheduled bidirectional unit* and voluntarily scheduled resource (in respect of generation and consumption), *scheduled network service* and/or *scheduled load* that is:
 - (1) at least the *minimum ramp rate* for the *scheduled resource*, determined as follows:
 - (i) in the case of a *scheduled resource* that is not aggregated in accordance with clause 3.8.3, the *minimum ramp rate* is equal to the applicable *minimum ramp rate requirement*; or
 - (ii) in the case of a *scheduled network service* that is aggregated in accordance with clause 3.8.3, the *minimum ramp rate* is the amount equal to ~~the product of~~ the *minimum ramp rate requirement* and the number of individual for the aggregated scheduled network services (and for the avoidance of doubt clause 3.8.3 does not apply to this subparagraph (ii)); or
 - (iii) **[deleted]**
 - (iv) in the case of a *scheduled resource* that is aggregated in accordance with clause 3.8.3, the *minimum ramp rate* is equal to the ~~sum of the~~ *minimum ramp rate requirement* for ~~each the aggregated individual~~ scheduled resource (and for the avoidance

of doubt clause 3.8.3 does not apply to this subparagraph (iv));
and

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

Note

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

- (c) A *Market Participant* to which this clause 3.8.3A applies may provide a *ramp rate* to *AEMO* for its *scheduled resource* that is less than the *minimum ramp rate* if the *ramp rate* is affected by an event or other occurrence that:

(1) physically prevents the relevant *generating unit*, *scheduled bidirectional unit*, *voluntarily scheduled resource*, *scheduled load* or *scheduled network service* from attaining a *ramp rate* of at least the *minimum ramp rate*; or

(2) makes it unsafe for the relevant *generating unit*, *scheduled bidirectional unit*, *scheduled load* or *scheduled network service* to operate at a *ramp rate* of at least the *minimum ramp rate*,

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

- (d) If a *Market Participant* to which this clause 3.8.3A applies provides a *ramp rate* that is less than the *minimum ramp rate*, it must provide a *ramp rate* to *AEMO* that is the maximum the relevant *generating unit*, *scheduled bidirectional unit*, *voluntarily scheduled resource*, *scheduled load* or *scheduled network service* can safely attain at that time.

Note

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

- (e) If a *Market Participant* to which this clause applies provides a *ramp rate* that is less than the *minimum ramp rate*, it must simultaneously provide *AEMO* with a brief, verifiable and specific reason why the *ramp rate* is below the *minimum ramp rate*.

- (f) The *AER* may require, upon written request, the *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 *Market Participant* to which this clause applies provides a *maximum ramp rate* in accordance with clause 3.13.3(b) of less than the *minimum ramp rate*, it must provide *AEMO* with a brief, verifiable and specific reason why the *ramp rate* is below "the *minimum ramp rate*."

- (i) Clauses 3.8.3A(b), 3.8.3A(c) and 3.8.3A(e) do not apply to a *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 the *minimum ramp rate*; and
 - (2) it has notified *AEMO* of this in accordance with clause 3.8.3A(h).
- (j) In addition to the obligations in clause 3.8.3A(d), if clause 3.8.3A(i) applies, the *Market Participant* must only provide *ramp rates* that are, at most, the *maximum ramp rate* for the relevant *generating unit*, *scheduled bidirectional unit*, *voluntarily scheduled resource*, *scheduled load* or *scheduled network service* in accordance with clause 3.13.3(b).

Note

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

3.8.4 Notification of scheduled capacity

A *Market Participant* must inform *AEMO* of the *available capacity* of each of its *scheduled resources* (other than its *semi-scheduled generating units*) as follows in accordance with the *timetable*:

- (a) a *Market Participant* must notify *AEMO* of the *available capacity* of each of its *scheduled resources* for each *trading interval* of the *trading day*;

Note

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

- (b) subsequent changes may only be made to the information provided under clause 3.8.4(c), (d), (e) and (f) in accordance with clause 3.8.22;

Note

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

- (c) for *scheduled generating units* ~~and~~ *scheduled bidirectional units* and voluntarily scheduled resources, two days ahead of each *trading day*:

- (1) for a *scheduled generating unit*, a MW capacity profile that specifies the MW available for each of the 288 *trading intervals* in the *trading day*;

- (1A) for a *scheduled bidirectional unit* and a *voluntarily scheduled resource*, for each of *generation* and *consumption*, a MW capacity profile that specifies the MW available for each of the 288 *trading intervals* in the *trading day*;

- (2) estimated *commitment* or *decommitment* times for *scheduled generating units*;

- (3) daily *energy* availability for *energy constrained scheduled generating units*, ~~and~~ *energy constrained scheduled bidirectional units* and voluntarily scheduled resources with energy constraints;

In subparagraph 3.8.4(c)(3), omit "*energy constrained scheduled generating units and energy constrained scheduled bidirectional units;*" and substitute "*scheduled generating units with energy constraints and scheduled bidirectional units with energy constraints;*".

- (3) daily *energy* availability for *scheduled generating units with energy constraints and scheduled bidirectional units with energy constraints;*

- (4) for a *scheduled generating unit*, an up *ramp rate* and a down *ramp rate*; and

Note

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

- (5) for a *scheduled bidirectional unit* and a voluntarily scheduled resource, an up *ramp rate* and a down *ramp rate* for generation from, ~~the *bidirectional unit*~~ and an up *ramp rate* and a down *ramp rate* for consumption by, ~~the *bidirectional unit*~~ or the voluntarily scheduled resource;

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

- (1) a MW capacity profile that specifies the MW available for *dispatch* for each of the 288 *trading intervals* in the *trading day*;
- (2) daily *energy* availability for *energy constrained scheduled load*; and

[ERC0332 - 31 July 2025](#)

In subparagraph 3.8.4(d)(2), omit "*energy constrained scheduled load; and*" and substitute "*scheduled loads with energy constraints; and*".

- (3) an up *ramp rate* and a down *ramp rate*;

Note

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

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

- (1) a MW capacity profile that specifies the *power transfer capability* in each direction available for each of the 288 *trading intervals* in the *trading day*; and
- (2) an up *ramp rate* and a down *ramp rate*; and

Note

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

- (f) for *wholesale demand response units*, two days ahead of each *trading day*:

- (1) a MW capacity profile that (subject to clauses 3.8.2A(b), (c), (d) and (e)) specifies the *wholesale demand response* available for *dispatch* for each of the 288 *trading intervals* in the *trading day*; and

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

Note

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

3.8.6 Dispatch bids - generating units ~~and~~, bidirectional units and voluntarily scheduled resources

- (a0) A *Scheduled Generator*, *Semi-Scheduled Generator* ~~and~~, *Scheduled Integrated Resource Provider* and *Voluntarily Scheduled Resource Provider* must comply with the applicable requirements of this clause 3.8.6 when submitting a *dispatch bid*.

Scheduled generating units

- (a) A *dispatch bid* for a *scheduled generating unit* must:
- (1) contain its intended *self-dispatch level* for each *trading interval*, and may contain up to 10 *price bands* which may be for:
 - (i) possible *dispatch* above the intended *self-dispatch level*; or
 - (ii) possible *off-loading* below the intended *self-dispatch level*, by *dispatch instruction*;
 - (2) specify for each of the 288 *trading intervals* in the *trading day*:
 - (i) a MW capacity for the intended *self-dispatch level*;
 - (ii) an incremental MW amount for each *price band* specified in the *dispatch bid*; and
 - (iii) an up *ramp rate* and a down *ramp rate*;
 - (3) where the *dispatch bid* specifies a *self-dispatch level* of more than zero, specify at least one *price band* for *off-loading* below the intended *self-dispatch level* and the total MW quantity in *price bands* specified for *off-loading* in each *trading interval* must equal the MW quantity of the *self-dispatch level* for that *trading interval* to enable possible *off-loading* to a zero *dispatch level*; and
 - (4) specify a *loading price* or an *off-loading price* for each *price band* specified in the *dispatch bid*, in dollars and whole cents per MWh, and this price is to apply to the *price band* throughout the *trading day*.
- (b) A *Scheduled Generator's dispatch bid* must specify the daily *energy* available for *energy constrained scheduled generating units*.

ERC0332 - 31 July 2025

In paragraph 3.8.6(b), omit "*energy constrained scheduled generating units*" and substitute "*scheduled generating units with energy constraints*".

- (b) A *Scheduled Generator's dispatch bid* must specify the daily *energy* available for *scheduled generating units with energy constraints*.

- (c) The *loading price* for a *scheduled generating unit* must be equal to or greater than \$0/MWh and may not exceed the product of the *market price cap* and the relevant *intra-regional loss factor* at the *transmission network connection point* for the *scheduled generating unit*.
- (d) A *loading price* specified for a *price band* is to be interpreted as the minimum price at which up to the specified MW increment is to be loaded in the *central dispatch* process.
- (e) The *off-loading prices* for a *scheduled generating unit* must be less than \$0/MWh, that is, negative in sign and may not be less than the product of the *market floor price* and the relevant *intra-regional loss factor* at the *transmission network connection point* for the *scheduled generating unit*.
- (f) An *off-loading price* specified for a *price band* is to be interpreted as the maximum price payable to AEMO by the *Scheduled Generator* in respect of the *scheduled generating unit's sent out generation* with the *scheduled generating unit's* output reduced below its specified *self-dispatch level* in the *central dispatch* process by an amount less than the specified MW increment.

Semi-scheduled generating units

- (g) A *dispatch bid* for a *semi-scheduled generating unit* may contain up to 10 *price bands* and must:
 - (1) specify for each of the 288 *trading intervals* in the *trading day*:
 - (i) an incremental MW amount for each *price band* specified in the *dispatch bid*; and
 - (ii) an up *ramp rate* and a down *ramp rate*; and
 - (2) specify a price for each *price band* specified in the *dispatch bid*, in dollars and whole cents per MWh, and this price is to apply to the *price band* throughout the *trading day*.

Scheduled bidirectional units and voluntarily scheduled resources

- (g1) A *dispatch bid* for a *scheduled bidirectional unit* or a voluntarily scheduled resource may contain up to 10 *price bands* for production from the *bidirectional unit* or a voluntarily scheduled resource and up to 10 *price bands* for consumption by the *bidirectional unit* or a voluntarily scheduled resource and must:
 - (1) specify for each of the 288 *trading intervals* in the *trading day*:
 - (i) an incremental MW amount for each *price band* specified in the *dispatch bid*; and
 - (ii) an up *ramp rate* and a down *ramp rate* for *generation* and an up *ramp rate* and a down *ramp rate* for *consumption*; and
 - (2) specify a price for each *price band* specified in the *dispatch bid*, in dollars and whole cents per MWh, and this price is to apply to the *price band* throughout the *trading day*;
- (g2) A *Scheduled Integrated Resource Provider's dispatch bid* must specify the daily *energy* available for *energy constrained scheduled bidirectional units*.

(g3) A Voluntarily Scheduled Resource Provider's dispatch bid must specify the daily energy available for voluntarily scheduled resources with energy constraints.

ERC0332 — 31 July 2025

In subparagraph 3.8.6(g2), omit "energy constrained scheduled bidirectional units" and substitute "scheduled bidirectional units with energy constraints".

(g2) A Scheduled Integrated Resource Provider's dispatch bid must specify the daily energy available for scheduled bidirectional units with energy constraints.

Scheduled and semi-scheduled generating units and scheduled bidirectional units

(h) A dispatch bid for a scheduled generating unit, semi-scheduled generating unit, ~~or~~ scheduled bidirectional unit or voluntarily scheduled resource must meet the following requirements:

- (1) the MW quantities specified are to apply at the terminals of the scheduled generating unit, semi-scheduled generating unit, ~~or~~ scheduled bidirectional unit or voluntarily scheduled resource or, with AEMO's agreement, at any other point in the relevant Generator's, ~~or~~ Scheduled Integrated Resource Provider's or Voluntarily Scheduled Resource Provider's electrical installation or on the network;
- (2) prices specified for each price band specified in the dispatch bid must increase monotonically with an increase in available MWs;
- (3) prices specified are to apply at the connection point of the scheduled generating unit, semi-scheduled generating unit, ~~or~~ scheduled bidirectional unit or voluntarily scheduled resource (as the case may be) and for the purposes of central dispatch shall be referred to the regional reference node to which that connection point is assigned as follows:

$$RP = DOP \div LF$$

where

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

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

LF where ~~the connection point~~:

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

- (iii) two or more voluntarily scheduled resources have been aggregated in accordance with clause 3.8.3, a loss factor determined in accordance with clause 3.10A.3(c)(1); and
- (4) the MW quantity specified in each *price band* in each *trading interval* must be specified in whole MW.

Note

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

3.8.21 On-line dispatch process

- (a) *Dispatch bids* must be *centrally dispatched* by *AEMO* using the *dispatch algorithm*.
- (a1) **[Deleted]**
- (b) The *dispatch algorithm* is to be run by *AEMO* for each *trading interval*. If the *dispatch algorithm* is not successfully run for any *trading interval* then the values of the last successful run of the *dispatch algorithm* must be used for that *trading interval*.
- (c) *Central dispatch* results in the setting of *spot prices* and *ancillary services prices* for each *trading interval* in accordance with rule 3.9.
- (d) *AEMO* will issue *dispatch instructions* to *Market Participants* electronically.
- (e) *AEMO* may issue *dispatch instructions* in some other form if in its reasonable opinion issuing *dispatch instructions* electronically is not reasonably possible.
- (f) A *Market Participant* must ensure it has facilities to receive *dispatch instructions* in the manner described in this clause 3.8.21.
- (g) *Dispatch instructions* that are issued via the *AGC* are to be issued progressively at intervals of no more than 5 minutes following re-evaluation of *central dispatch* to achieve a prompt and smooth implementation of the outcomes of each *central dispatch* update.
- (h) With the exception of instructions issued by telephone, all *dispatch instructions* and the times at which they are issued are to be logged automatically and *dispatch instructions* that are issued by telephone must be recorded by *AEMO*.
- (i) *AEMO* may modify or override the *dispatch algorithm* outcome in accordance with the requirements of clause 4.8.9 or due to *plant* not conforming to *dispatch instructions* and in such circumstances *AEMO* must record the details of the event and the reasons for its action for audit purposes.
- (j) If a *scheduled resource*, in respect of which a *dispatch inflexibility profile* has been notified to *AEMO* in accordance with clause 3.8.19, is *dispatched* from 0 MW in any *trading interval* by the *central dispatch* process, then the specified *dispatch inflexibility profile* must be used by *AEMO* as a *constraint* on the *dispatch* of that *scheduled resource* for the relevant subsequent *trading intervals*.

- (k) A *scheduled resource* whose *dispatch* is constrained in any trading interval due to a *dispatch inflexibility profile* submitted under clause 3.8.19 cannot be used as the basis for setting the *spot price* in that trading interval at any location.
- (l) AEMO must fully document the operation of the process described in this clause 3.8.21, including the software, algorithms, and the principles adopted in making judgments where they are required in the process and all such documentation must be made available to *Market Participants* at a price reflective of costs incurred by AEMO in providing such documentation.
- (m) Where the *central dispatch* process may have failed to dispatch a *scheduled resource (other than a wholesale demand response unit or a scheduled network service) generating unit, semi-scheduled generating unit, bidirectional unit or scheduled load* to maximise the joint value of energy and ancillary services due to the relevant *scheduled resource* operating outside its *enablement limit*, AEMO must notify the relevant *Market Participant* electronically on a confidential basis.
- (n) When a *wholesale demand response unit* is dispatched to provide *wholesale demand response*, AEMO must as soon as practicable after giving the relevant *dispatch instruction* notify that fact to the *financially responsible Market Participant* for the *connection points* comprised in the *wholesale demand response unit* on a confidential basis.

3.8.22A Bids and rebids must not be false or misleading

- (a) A *Scheduled Generator, Semi-Scheduled Generator* or *Market Participant* must not make a *dispatch bid* or *rebid* that is false, misleading or likely to mislead.
- (a1) For the purposes of paragraph (a), the making of a *dispatch bid* or *rebid* is deemed to represent to other *Generators* or *Market Participants* through the *pre-dispatch schedules* published by AEMO that the *dispatch bid* or *rebid* will not be changed, unless the *Generator* or *Market Participant* becomes aware of a change in the material conditions and circumstances upon which the *dispatch bid* or *rebid* are based.
- (a2) For the purposes of paragraph (a), the making of a *wholesale demand response dispatch bid* by a *Demand Response Service Provider* is deemed to represent to other *Market Participants* through the *pre-dispatch schedules* published by AEMO that:
 - (1) any *baseline deviation* of the *wholesale demand response unit* in response to a *dispatch instruction* will be the result of *wholesale demand response activity* in relation to the *wholesale demand response unit*; and
 - (2) there will be no *baseline deviation offset* in relation to the *baseline deviation* of the *wholesale demand response unit* in the period for which the *wholesale demand response unit* is dispatched.
- (b) Without limiting paragraph (a), a *dispatch bid* or *rebid* is deemed to be false or misleading if, at the time of making the *dispatch bid* or *rebid*, a *Scheduled Generator, Semi-Scheduled Generator* or *Market Participant*:

- (1) does not have a genuine intention to honour; or
 - (2) does not have a reasonable basis to make;
- the representations made by reason of paragraph (a1) or paragraph (a2).
- (b1) In any proceeding in which a contravention of paragraph (a) is alleged, in determining whether a *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* made a *dispatch bid* or *rebid* that was false, misleading or likely to mislead, a court must have regard to the market design principle set out in clause 3.1.4(a)(2).
- (c) A *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* may be taken to have contravened paragraph (a) notwithstanding that, after all the evidence has been considered, the false or misleading character of the *dispatch bid* or *rebid* (including either of the matters referred to in subparagraphs (b)(1) and (2)) is ascertainable only by inference from:
- (1) other *dispatch bids* or *rebids* made by the *Generator* or *Market Participant*, or in relation to which the *Generator* or *Market Participant* had substantial control or influence;
 - (2) other conduct (including any pattern of conduct), knowledge, belief or intention of the relevant *Generator* or *Market Participant*;
 - (3) the conduct (including any pattern of conduct), knowledge, belief or intention of any other person;
 - (4) information published by *AEMO* to the relevant *Generator* or *Market Participant*; or
 - (5) any other relevant circumstances.
- (d) A *rebid* must be made as soon as practicable after the *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* becomes aware of the change in material conditions and circumstances on the basis of which it decides to vary its *dispatch bid*.
- (e) In any proceeding in which a contravention of paragraph (d) is alleged, in determining whether the *Generator* or *Market Participant* made a *rebid* as soon as practicable, a court must have regard to:
- (1) the market design principle set out in clause 3.1.4(a)(2); and
 - (2) the importance of *rebids* being made, where possible, in sufficient time to allow reasonable opportunity for other *Market Participants* to respond (including by making responsive *rebids*, by bringing one or more *generating units* ~~or~~ *bidirectional units* or *voluntarily scheduled resources* into operation, or ~~increasing or decreasing~~ *adjusting* the loading level of any *generating units*, ~~or bidirectional units,~~ ~~or by adjusting the loading level of any load,~~ ~~or~~ *wholesale demand response units* or *voluntarily scheduled resources*) prior to the commencement of the *trading interval* to which the *rebid* relates, and may have regard to any other relevant matter, including any of the matters referred to in sub-paragraphs (c)(1) to (5).

Note

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

3.8.23 Failure to conform to dispatch instructions excluding wholesale demand response units and voluntarily scheduled resources

- (a) If a *scheduled generating unit, scheduled bidirectional unit, scheduled network service or scheduled load* fails to respond to a *dispatch instruction* within a tolerable time and accuracy (as determined in *AEMO's* reasonable opinion), then the *scheduled generating unit, scheduled bidirectional unit, scheduled network service or scheduled load* (as the case may be):
- (1) is to be declared and identified as non-conforming; and
 - (2) cannot be used as the basis for setting *spot prices*.
- (b) If a *semi-scheduled generating unit* fails to respond to a *dispatch instruction* within a tolerable time and accuracy (as determined in *AEMO's* reasonable opinion) in a *semi-dispatch interval* where the unit's actual *generation* is more than the *dispatch level*, the unit is to be declared and identified as non-conforming and cannot be used as the basis for setting *spot prices*.
- (c) If a *scheduled resource* is identified as non-conforming under paragraphs (a) or (b):
- (1) *AEMO* must advise the relevant *Market Participant* that the relevant *scheduled resource* is identified as non-conforming, and request and log a reason for the non-compliance with the *dispatch instruction*;
 - (2) if in *AEMO's* opinion modification of *plant* parameters is necessary or desirable, *AEMO* must request the relevant *Market Participant* to submit modified *plant* parameters to satisfy *AEMO* that a realistic real time *dispatch* schedule can be carried out;
 - (3) should a *Scheduled Generator, Semi-Scheduled Generator or Scheduled Integrated Resource Provider* fail to meet the requests set out subparagraphs (1) and (2) or if *AEMO* is not satisfied that the *generating unit or scheduled bidirectional unit* will respond to future *dispatch instructions* as required, *AEMO* must direct the *generating unit or scheduled bidirectional unit* to follow, as far as is practicable, a specified output and (where applicable) consumption profile to be determined at its discretion by *AEMO*;
 - (4) should a *Scheduled Network Service Provider* fail to meet the requests set out in subparagraphs (1) and (2) or if *AEMO* is not satisfied that the *scheduled network service* will respond to future *dispatch instructions* as required, *AEMO* must direct the *scheduled network service* to follow, as far as is practicable, a specified transfer profile to be determined at its discretion by *AEMO*; and
 - (5) should a *Market Customer, or an Integrated Resource Provider* in respect of a *scheduled load*, not meet the requests set out in subparagraphs (1) and (2) within a reasonable time of the request, or if *AEMO* is not satisfied that the *scheduled load* will respond to future

dispatch instructions as required, *AEMO* acting reasonably may invoke a *default bid* lodged by the relevant *Market Participant* or apply *constraints* as it deems appropriate.

- (d) Until a *Market Participant* satisfactorily responds to the requests under paragraphs (c)(1) and (2) and *AEMO* is satisfied that the relevant *scheduled resource* will respond to future *dispatch instructions* as required, that *scheduled resource* continues to be non-conforming.
- (e) If a *scheduled resource* continues to be non-conforming under this clause 3.8.23 after a reasonable period of time, *AEMO* must prepare a report setting out the details of the non-conformance and forward a copy of the report to the relevant *Market Participant* (as the case may be) and the *AER*.
- (f) The direction referred to in paragraphs (c)(3) and (4) must remain in place until the relevant *Market Participant* satisfies *AEMO* of rectification of the cause of the non-conformance.
- (g) If an *ancillary service unit* is enabled to provide a *market ancillary service* and fails to respond in the manner contemplated by the *market ancillary service specification* (as determined in *AEMO's* reasonable opinion), then:
 - (1) the *ancillary service unit* is to be declared and identified as non-conforming;
 - (2) *AEMO* must advise the relevant *Market Participant* that the *ancillary service unit* is identified as non-conforming, and request a reason for the non-conformance. The relevant *Market Participant* must promptly provide a reason if requested to do so, and the reason is to be logged; and
 - (3) *AEMO* may set a fixed level for the relevant *ancillary service* (in this clause 3.8.23 called the 'fixed constraint') for the *ancillary service unit* and the relevant *Market Participant* must ensure that the *ancillary service unit* complies with the fixed constraint set by *AEMO*.
- (h) *AEMO* must lift the fixed constraint in respect of an *ancillary service unit* when *AEMO* is reasonably satisfied (as a result of a test or otherwise) that the *ancillary service unit* is capable of responding in the manner contemplated by the *market ancillary service specification*.
- (i) In assessing a report of non-conformance with a *dispatch instruction* by a *scheduled load*, the *AER* shall have regard to whether a *default bid* had been lodged with *AEMO* and was, or could have reasonably been, applied in the circumstances applicable to that *scheduled load*.

3.8.23B Failure of voluntarily scheduled resources to conform to dispatch instructions

- (a) This clause does not apply to an inactive voluntarily scheduled resource.

Note

Inactive voluntarily scheduled resources are required to submit dispatch bids in accordance with clause 3.8.6 but are not required to follow dispatch instructions. See clauses 3.10A.2(c) and (g). Hibernated voluntarily scheduled resources do not participate in central dispatch at all. See clauses 3.10A.2(n) and (p).

- (b) If a voluntarily scheduled resource fails to respond to a dispatch instruction within a tolerable time and accuracy (as determined in AEMO's reasonable opinion), then the voluntarily scheduled resource:

 - (1) is to be declared and identified as non-conforming; and
 - (2) cannot be used as the basis for setting spot prices.
- (c) If a voluntarily scheduled resource is declared as non-conforming under paragraph (b), then:

 - (1) AEMO must advise the relevant Market Participant that the relevant voluntarily scheduled resource is identified as non-conforming, and request and log a reason for the non-compliance with the dispatch instruction;
 - (2) if, in AEMO's opinion, modification of plant parameters is necessary or desirable, AEMO must request the relevant Market Participant to submit modified plant parameters to satisfy AEMO that a realistic real time dispatch schedule can be carried out.
- (d) If a voluntarily scheduled resource is identified as non-conforming under paragraph (b), it continues to be non-conforming until:

 - (1) the Voluntarily Scheduled Resource Provider responds to any requests under paragraph (c); and
 - (2) AEMO is satisfied that the voluntarily scheduled resource will respond to future dispatch instructions as required.
- (e) If a voluntarily scheduled resource is identified as non-conforming under paragraph (b), AEMO acting reasonably may, by notice to a Voluntarily Scheduled Resource Provider, require the Voluntarily Scheduled Resource Provider to limit the available capacity of the non-conforming voluntarily scheduled resource to a maximum figure determined by AEMO for so long as the voluntarily scheduled resource remains non-conforming.
- (f) A notice given under paragraph (e) remains in place until:

 - (1) the voluntarily scheduled resource ceases to be non-conforming in accordance with paragraph (d); or
 - (2) AEMO varies the notice by giving a further notice under paragraph (e).
- (g) If a voluntarily scheduled resource continues to be non-conforming after a reasonable period, AEMO must prepare a report setting out the details for the non-conformance and forward a copy to the Voluntarily Scheduled Resource Provider and the AER.

3.9 Price Determination

3.9.1 Principles applicable to spot price determination

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

 - (1) **[Deleted]**

- (2) a *spot price* at a *regional reference node* is determined by the *central dispatch process* at that *regional reference node* for each *trading interval*;
- (2A) the *central dispatch process* must determine an *ancillary service price* for each *market ancillary service* at each *regional reference node* for each *trading interval*;
- (3) *spot prices* determine *dispatch* such that a *generating unit, bidirectional unit, wholesale demand response unit, voluntarily scheduled resource* or *scheduled load* whose *dispatch bid* at a location is below the *spot price* at that location will normally be *dispatched*;
- (3A) *plant* that operates in accordance with a *direction* is to be taken into account in the *central dispatch process*, but the *dispatch bid* for the relevant *plant* will not be used in the calculation of the *spot price* for the relevant *trading interval*;
- (3B) *ancillary service units* the subject of a fixed constraint (within the meaning of clause 3.8.23(g)) are to be taken into account in the *central dispatch process*, but the price in a *market ancillary service bid* in respect of the relevant *ancillary service unit* will not be used in the calculation of the *ancillary service price* for that *market ancillary service* for the relevant *trading interval*;
- (3C) *plant* that operates in accordance with a *direction* to provide an *ancillary service* is to be taken into account in the *central dispatch process*, but the price in a *market ancillary service bid* in respect of the relevant *plant* will not be used in the calculation of the *ancillary service price* for that *market ancillary service* for the relevant *trading interval*;
- (4) *network losses, network constraints*, the availability of *scheduled network services* and *dispatch bids* for *scheduled network services* are taken into account in the determination of *dispatch* and consequently affect *spot prices* and (apart from *network losses*) *ancillary services prices*;
- (5) where the *energy output* of a *Market Participant* is limited above or below the level at which it would otherwise have been *dispatched* by *AEMO* on the basis of its *dispatch bid* due to a *direction* to provide *ancillary services*, the *Registered Participant's dispatch bid* is taken into account in the determination of *dispatch* but the *dispatch bid* will not be used in the calculation of the *spot price* for the relevant *trading interval*;
- (5A) *market ancillary service bids*, in other *ancillary services markets*, due to an *ancillary services direction* are taken into account in the determination of *dispatch* and consequently affect *ancillary service prices* in those other *ancillary services markets*;
- (6) when the *spot price* is determined, it applies to both sales and purchases of electricity (including through the provision of *wholesale demand response*) at a particular location and time;
- (6A) when an *ancillary service price* is determined for an *ancillary service*, it applies to purchases of that *ancillary service*;

- (6B) when an *ancillary service price* is determined under paragraph (6A) for a *regulation service*, it applies to purchases of that *regulation service* and, where appropriate, purchases of a *delayed service*;
 - (7) *spot prices* provide *Market Participants* with signals as to the value of providing or cost of consuming electricity at a particular location at a particular time; and
 - (7A) *ancillary service prices* provide *Ancillary Service Providers* with signals as to the value of providing the relevant *market ancillary service* within a particular *region* at a particular time.
- (b) A single *regional reference price* provides a reference from which the *spot prices* are determined within each *region*.
 - (c) The local *spot price* at each *transmission network connection point* is the *spot price* at the *regional reference node* for the *region* to which the *connection point* is assigned multiplied by the relevant *intra-regional loss factor* applicable to that *connection point*.

Note

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

3.9.3 Pricing in the event of intervention by AEMO

- (a) In respect of a *trading interval* where one or more *AEMO intervention event(s)* is in effect, *AEMO* must declare that *trading interval* to be an *intervention trading interval*.
- (b) Subject to subparagraphs (b2)(1) and (b2)(2), if, in *AEMO's* reasonable opinion, the reason for an *AEMO intervention event* is to obtain either:
 - (1) a service for which a *spot price* or *ancillary service price* is determined by the *dispatch algorithm*; or
 - (2) a service that is a direct substitute for a service for which a *spot price* or *ancillary service price* is determined by the *dispatch algorithm*,then, subject to paragraph (c), *AEMO* must in accordance with the methodology or assumptions *published* pursuant to paragraph (e), set the *spot price* and *ancillary service prices* for an *intervention trading interval* at the value which *AEMO*, in its reasonable opinion, considers would have applied as the *spot price* and *ancillary service prices* for that *trading interval* in the relevant *region* had the *AEMO intervention event* not occurred.
- (b1) Without limitation, examples of the types of service referred to in paragraph (b) include:
 - (1) *energy* that is capable of being provided by any *generating unit*, ~~or~~ *bidirectional unit* or voluntarily scheduled resource within a *region*;
 - (2) *energy* which, as a result of a *network constraint* or other *constraint*, is only capable of being provided by any *generating unit*, ~~or~~ *bidirectional unit* or voluntarily scheduled resource located in the part of the *region* that includes the *regional reference node*;

- (3) *market ancillary services* that are capable of being provided by any *ancillary service unit* within a *region*;
 - (4) *market ancillary services* which, as a result of a *network constraint* or other *constraint*, are only capable of being provided by any *ancillary service unit* located in the part of the *region* that includes the *regional reference node*; and
 - (5) demand response that reduces the need for the provision of *energy* or *market ancillary services* within a *region*.
- (b2) *AEMO* must continue to set *spot prices* pursuant to clause 3.9.2 and *ancillary service prices* pursuant to clause 3.9.2A if the reason for an *AEMO intervention event* is to obtain:
- (1) *energy* and *market ancillary services* which, as a result of a *network constraint* or other *constraint*, are only capable of being provided by a *generating unit*, ~~*or*~~, *bidirectional unit*, *voluntarily scheduled resource* or *ancillary service unit* in a part of the *region* which, due to the *constraint*, does not include the *regional reference node*; or
 - (2) demand response which, as a result of a *network constraint* or other *constraint*, is needed to reduce demand for *energy* or *market ancillary services* in a part of the *region* which, due to the *constraint*, does not include the *regional reference node*; or
 - (3) a service for which a *spot price* or *ancillary service price* is not determined by the *dispatch algorithm*, regardless of whether *energy* or *market ancillary services* are also provided incidental to the provision of that service.
- (b3) Without limitation examples of the services referred to in subparagraph (b2)(3) include the provision of:
- (1) *inertia*;
 - (2) *voltage control*;
 - (3) *system strength*; and
 - (4) *non-market ancillary services*.
- (b4) In respect of any *intervention price trading interval* in which more than one *AEMO intervention event* is in effect, *AEMO* must in accordance with the methodology or assumptions *published* pursuant to paragraph (e) set *spot prices* and *ancillary service prices* pursuant to paragraph (b) as if:
- (1) the services described in paragraph (b) were not provided; and
 - (2) *energy* or *market ancillary services* provided incidental to the provision of any services described in subparagraph (b2)(3) were taken into account.
- (c) *AEMO* may continue to set *spot prices* pursuant to clause 3.9.2 and *ancillary service prices* pursuant to clause 3.9.2A until the later of:
- (1) the second *trading interval* after the first *trading interval* in which the *AEMO intervention event* occurred; or

- (2) if applicable, the second *trading interval* after the restoration of the *power system* to a *secure operating state* after any *direction* which constitutes the *AEMO intervention event* was issued,

provided that *AEMO* must use its reasonable endeavours to set *spot prices* and *ancillary service prices* pursuant to clause 3.9.3(b) as soon as practicable following the *AEMO intervention event*.

- (d) **[Deleted]**.
- (e) Subject to paragraph (g), *AEMO* must develop in accordance with the *Rules consultation procedures* and *publish* details of the methodology it will use, and any assumptions it may be required to make, to determine *spot prices* and *ancillary service prices* for the purposes of paragraph (b).
- (f) The methodology developed by *AEMO* under paragraph (e) must wherever reasonably practicable:
- (1) be consistent with the principles for *spot price* determination set out in clause 3.9.1;
 - (2) enable *AEMO* to determine and *publish* such prices in accordance with clause 3.13.4; and
 - (3) be consistent with the principles for *ancillary service price* determination set out in clauses 3.9.2 and 3.9.2A.
- (g) *AEMO* may make minor and administrative amendments to the methodology developed under paragraph (e) without complying with the *Rules consultation procedures*.

3.10A Voluntarily scheduled resources

3.10A.1 Nominating voluntarily scheduled resources

Resources which may be nominated as a voluntarily scheduled resource

- (a) **Qualifying resource** means:
- (1) a market generating unit that is a non-scheduled generating unit;**
 - (2) a market bidirectional unit that is a non-scheduled bidirectional unit;**
 - (3) a market -connection point that is non-scheduled load; or**
 - (4) one or more small generating units or small bidirectional units (or any combination) at a small resource connection point classified as a market connection point in accordance with clause 2.2.8.**
- (b) **Subject to paragraph (c), a person registered as a Generator, Integrated Resource Provider or Market Customer, in respect of one or more qualifying resources, may apply to AEMO to nominate its qualifying resource as a voluntarily scheduled resource under this clause, and may apply for two or more voluntarily scheduled resources to be aggregated as a single voluntarily scheduled resource under clause 3.8.3.**

Application process to nominate a voluntarily scheduled resource

- (c) **An application to nominate a voluntarily scheduled resource under paragraph (a) must be in the form prescribed by AEMO and must:**

- (1) identify the *NMI* and *connection point* associated with the *qualifying resource*; and
- (2) demonstrate how the *qualifying resource* meets the requirements specified in the *Voluntarily Scheduled Resource Guidelines*.
- (d) *AEMO* must, within *5 business days* of receiving a nomination application under paragraph (ba), advise the applicant of any further information or clarification which is required in support of its application if, in *AEMO's* reasonable opinion, the application:
 - (1) is incomplete; or
 - (2) contains information upon which *AEMO* requires clarification.
- (e) If the further information or clarification required pursuant to paragraph (ed) is not provided to *AEMO's* satisfaction within *15 business days* of the request, *AEMO* may, on notice to the applicant at any time after expiry of that period, elect to treat the application as withdrawn and the applicant will be deemed to have withdrawn the application.
- (f) *AEMO* must, subject to paragraph (g), approve the application for nomination under paragraph (ba), if *AEMO* is reasonably satisfied that:
 - (1) the request is made in respect of a *qualifying resource*;
 - (2) the applicant has submitted data in accordance with Schedule 3.1;
 - (3) the applicant has adequate communications and/or telemetry in place to support the exchange of required data for the *qualifying resource*; and
 - (4) the *qualifying resource* satisfies each other requirement in the *voluntarily scheduled resource guidelines* for nomination as a *voluntarily scheduled resource*.
- (g) *AEMO* must not give approval to a person under paragraph (f) in respect of a *qualifying resource* that is classified as a *voluntarily scheduled resource* by a different person.

Effect of approval for nomination as a voluntarily scheduled resource

- (h) If *AEMO* gives approval under paragraph (f) to nominate a *qualifying resource* as a *voluntarily scheduled resource*, then subject to subparagraph (i)(1):
 - (1) the *voluntarily scheduled resource* is a *scheduled resource* (but does not become classified as a *scheduled generating unit* or *scheduled bidirectional unit*); and
 - (2) this approval substitutes the previous classification approved by *AEMO* under Chapter 2 of the *Rules* for that *qualifying resource* as a *non-scheduled generating unit*, *non-scheduled bidirectional unit* or *non-scheduled load* (as applicable).

Note:

Approval of a *qualifying resource* as a *voluntarily scheduled resource* does not affect the classification of that resource as a *market generating unit*, *market bidirectional unit* or *market connection point* (as applicable).

- (i) During those periods where a *voluntarily scheduled resource* is:

 - (1) a *hibernated voluntarily scheduled resource*, it will not be a *scheduled resource* and the requirements and exemptions in clause 3.10A.2(e) to (k) will apply; or
 - (2) an *inactive voluntarily scheduled resource*, the requirements and exemptions in clause 3.10A.2(p) to (v) will apply.
- (j) A person whose *qualifying resource* is approved for nomination as a *voluntarily scheduled resource* in accordance with paragraph (f), and if applicable, has been aggregated with other *voluntarily scheduled resources* as a single *voluntarily scheduled resource* under clause 3.8.3, is taken to be a *Voluntarily Scheduled Resource Provider* in so far as its activities relate to that *voluntarily scheduled resource*.
- (k) AEMO may approve the nomination of a *qualifying resource* as a *voluntarily scheduled resource* on such terms and conditions as AEMO considers necessary to ensure the provisions of the *Rules* applying to *voluntarily scheduled resources* can be met.
- (l) A *Voluntarily Scheduled Resource Provider* must comply with any terms and conditions imposed by AEMO under paragraph (k) in respect of its *voluntarily scheduled resource*.
- (m) A *Voluntarily Scheduled Resource Provider* must notify AEMO:

 - (1) immediately if the *Voluntarily Scheduled Resource Provider* ceases to be the *financially responsible Market Participant* for a *voluntarily scheduled resource*; or
 - (2) as soon as practicable, and in any event, no later than 10 *business days* after becoming aware that a *voluntarily scheduled resource* ceases to be a *qualifying resource*.
- (n) If a *Voluntarily Scheduled Resource Provider* gives AEMO a notice under paragraph (m) in respect of a *voluntarily scheduled resource*, the *voluntarily scheduled resource* ceases to be a *voluntarily scheduled resource* from the time the relevant notice is given.
- (o) A *Voluntarily Scheduled Resource Provider* may (but is not required to) participate in the *VSR incentive mechanism* in accordance with clause 3.10A.4.
- (p) A *Market Participant* in respect of a *qualifying resource* may participate in the *VSR incentive mechanism* in accordance with clause 3.10A.4 prior to applying to AEMO to nominate its *qualifying resource* as a *voluntarily scheduled resource* under this clause.

Note

A successful VSR incentive mechanism participant is required to nominate its qualifying resource under this clause 3.10A.1 before it can receive participation payments. See clause 3.10A.4(k).

3.10A.2 Temporary deactivation and hibernation of voluntarily scheduled resources

- (a) In this clause:

approved deactivation period means the deactivation period approved by *AEMO* for an *inactive voluntarily scheduled resource* under sub-paragraph (e)(2).

approved hibernation period means the hibernation period approved by *AEMO* for a *hibernated voluntarily scheduled resource* under sub-paragraph (p)(2).

deactivation request means a request submitted to *AEMO* seeking approval for the temporary deactivation of a *voluntarily scheduled resource* under paragraph (b).

hibernation request means request submitted to *AEMO* seeking approval for the temporary hibernation of a *voluntarily scheduled resource* under paragraph (n).

reactivation request means a request submitted to *AEMO* under paragraph (h) seeking approval for the reactivation of an *inactive voluntarily scheduled resource* as a *voluntarily scheduled resource*.

resumption request means a request submitted to *AEMO* under sub-paragraph (q)(1) seeking approval for the resumption of a *hibernated voluntarily scheduled resource* as a *voluntarily scheduled resource*.

Deactivation and reactivation requests

(b) A *Voluntarily Scheduled Resource Provider* may submit a deactivation request to *AEMO*.

(c) A deactivation request submitted under paragraph (b) must:

(1) specify a period of at least one *trading interval* and of no more than 7 days during which the *voluntarily scheduled resource* will only partially participate in *central dispatch*;

(2) contain the information required by the *voluntarily scheduled resource guidelines*;

(3) be submitted to *AEMO* in accordance with the process specified in the *voluntarily scheduled resource guidelines*; and

(4) where the *voluntarily scheduled resource* has been aggregated in accordance with clause 3.8.3, apply to each individual *voluntarily scheduled resource* forming part of the aggregated *voluntarily scheduled resource*.

(d) *AEMO* must approve or reject a deactivation request in accordance with the criteria specified in the *voluntarily scheduled resource guidelines*.

(e) If *AEMO* approves a deactivation request under paragraph (d):

(1) *AEMO* must record the status of the *voluntarily scheduled resource* as an *inactive voluntarily scheduled resource* in accordance with the *voluntarily scheduled resource guidelines*;

(2) *AEMO* must record the approved deactivation period of the *inactive voluntarily scheduled resource*;

- (3) AEMO may impose conditions on the inactive voluntarily scheduled resource in accordance with the voluntarily scheduled resource guidelines; and
- (4) the Voluntarily Scheduled Resource Provider remains a Voluntarily Scheduled Resource Provider in respect of the voluntarily scheduled resource and must continue to comply with the obligations for voluntarily scheduled resources under these Rules, except to the extent its inactive voluntarily scheduled resource is exempted from the application of a provision of the Rules in accordance with paragraph (g).
- (f) For the purposes of central dispatch, AEMO:
- (1) is not required to include dispatch bids submitted in respect of an inactive voluntarily scheduled resource in central dispatch or validate those dispatch bids in accordance with clause 3.8.8; and
 - (2) must specify, in the voluntarily scheduled resource guidelines, how an inactive voluntarily scheduled resource is to be treated by AEMO.
- (g) A Voluntarily Scheduled Resource Provider whose voluntarily scheduled resource is an inactive voluntarily scheduled resource is exempt from the application of:
- (1) clause 3.8.8;
 - (2) the requirements in the Rules to conform to dispatch instructions including clause 3.8.23B;
 - (3) clause 3.8.22A; and
 - (4) clauses 4.8.9 and 4.9.2.
- (h) A Voluntarily Scheduled Resource Provider must, prior to the end of the approved deactivation period and in accordance with the voluntarily scheduled resource guidelines, submit a reactivation request.
- (i) AEMO must approve or reject a reactivation request in accordance with the criteria specified in the voluntarily scheduled resource guidelines and must provide reasons for any rejection.
- (j) If AEMO approves a reactivation request under paragraph (i):
- (1) AEMO must remove the status of the voluntarily scheduled resource as an inactive voluntarily scheduled resource; and
 - (2) the Voluntarily Scheduled Resource Provider is no longer exempt from the application of a provision of the Rules in accordance with paragraph (g).
- (k) If Voluntarily Scheduled Resource Provider fails to submit a reactivation request in accordance with paragraph (h), or if AEMO rejects a reactivation request in accordance with paragraph (i), then:
- (1) the inactive voluntarily scheduled resource is automatically deemed to be a hibernated voluntarily scheduled resource; and
 - (2) the Voluntarily Scheduled Resource Provider must submit a hibernation request within 7 days that meets the requirements of paragraph (n) and,

if applicable, addresses the reasons given by AEMO for rejecting the reactivation request.

- (l) If a *Voluntarily Scheduled Resource Provider* fails to submit a hibernation request in accordance with paragraph (k)(2), then:
 - (1) the *Voluntarily Scheduled Resource Provider* ceases to be a *Voluntarily Scheduled Resource Provider* in respect of that *voluntarily scheduled resource*; and
 - (2) each relevant *qualifying resource* ceases to be a *voluntarily scheduled resource*.

Hibernation requests

- (m) A *Voluntarily Scheduled Resource Provider* may submit a hibernation request to AEMO.
- (n) A hibernation request submitted under paragraph (m) must:
 - (1) specify a hibernation period of at least 7 days and of no more than 18 months;
 - (2) contain the information required by the *voluntarily scheduled resource guidelines*;
 - (3) be submitted to AEMO in accordance with the process specified in the *voluntarily scheduled resource guidelines*; and
 - (4) where the *voluntarily scheduled resource* has been aggregated in accordance with clause 3.8.3, apply to each individual *voluntarily scheduled resource* forming part of the aggregated *voluntarily scheduled resource*.
- (o) AEMO must approve or reject a hibernation request in accordance with the criteria specified in the *voluntarily scheduled resource guidelines*.
- (p) If AEMO approves a hibernation request under paragraph (o):
 - (1) AEMO must record the status of the *voluntarily scheduled resource* as a *hibernated voluntarily scheduled resource* in accordance with the *voluntarily scheduled resource guidelines*;
 - (2) AEMO must record the approved hibernation period of the *hibernated voluntarily scheduled resource*; and
 - (3) for the duration of the approved hibernation period:
 - (i) AEMO may impose conditions on the *hibernated voluntarily scheduled resource* in accordance with the *voluntarily scheduled resource guidelines*; and
 - (ii) the *hibernated voluntarily scheduled resource* is not a *scheduled resource*.
- (q) A *Voluntarily Scheduled Resource Provider* must, prior to the end of the approved hibernation period and in accordance with the *voluntarily scheduled resource guidelines*:
 - (1) submit a resumption request; or

- (2) notify AEMO that each relevant *qualifying resource* is no longer nominated as a *voluntarily scheduled resource*.
- (r) If a *Voluntarily Scheduled Resource Provider* submits a notice under subparagraph (q)(2), the relevant *voluntarily scheduled resource* ceases to be a *voluntarily scheduled resource* in accordance with the timing and process specified in the *voluntarily scheduled resource guidelines*.
- (s) AEMO must approve or reject a resumption request in accordance with the criteria specified in the *voluntarily scheduled resource guidelines* and must provide reasons for any rejection.
- (t) If AEMO approves a resumption request under paragraph (s):

 - (1) AEMO must remove the status of the *voluntarily scheduled resource* as a *hibernated voluntarily scheduled resource*; and
 - (2) the *voluntarily scheduled resource* becomes a *scheduled resource* upon the completion of the approved hibernation period.

- (u) If AEMO rejects a resumption request under paragraph (s), the *Voluntarily Scheduled Resource Provider* must submit a new resumption request within 7 days that addresses the reasons given by AEMO for rejecting the resumption request.
- (v) If a *Voluntarily Scheduled Resource Provider* fails to submit a resumption request in accordance with paragraphs (q)(1) or (u), then, from the completion of the approved hibernation period:

 - (1) the *Voluntarily Scheduled Resource Provider* ceases to be a *Voluntarily Scheduled Resource Provider* in respect of that *voluntarily scheduled resource*; and
 - (2) each relevant *qualifying resource* ceases to be a *voluntarily scheduled resource*.

3.10A.3 Voluntarily scheduled resource guidelines

- (a) AEMO must develop and publish, and may amend, the *voluntarily scheduled resource guidelines* in accordance with the *Rules consultation procedures*.
- (b) The *voluntarily scheduled resource guidelines* must specify:

 - (1) requirements for nominating a *qualifying resource* as a *voluntarily scheduled resource* in accordance with clause 3.10A.1;
 - (2) the requirements and process for aggregation of *voluntarily scheduled resources* in accordance with clause 3.8.3, including the circumstances in which AEMO may request *Voluntarily Scheduled Resource Providers* that have aggregated *voluntarily scheduled resources* to declare individual *qualifying resource* availability and operating status to AEMO pursuant to clause 3.8.3(f2);
 - (3) a requirement that the *Voluntarily Scheduled Resource Provider* is the *financially responsible Market Participant* in respect of a *connection point* nominated as a *voluntarily scheduled resource*;
 - (4) a framework for testing the capabilities of *qualifying resources* prior to their request for nomination as a *voluntarily scheduled resource*;

- (5) operational requirements for a *voluntarily scheduled resource* including:

 - (i) the types of data to be provided by a *Voluntarily Scheduled Resource Provider* to *AEMO* and by *AEMO* to a *Voluntarily Scheduled Resource Provider*;
 - (ii) information about the requirements for telemetry and communications equipment;
 - (iii) the minimum threshold for nameplate rating, or combined nameplate rating, of a *voluntarily scheduled resource*;
 - (iv) the *dispatch* conformance criteria;
 - (v) the acceptable types of *metering installation* for participating *connection points*; and
 - (vi) requirements for sharing data with *Distribution Network Service Providers*;
- (6) the matters required by clause 3.10A.2; and
- (7) any other information that *AEMO* considers reasonably necessary.
- (c) The *voluntarily scheduled resource guidelines* must also specify zonal aggregation requirements including:

 - (1) a methodology for determining zones in which *voluntarily scheduled resources* participate in *central dispatch* as well as the *loss factor* that is to apply in each zone for the purpose of clause 3.8.6(h);
 - (2) requirements and conditions on *Voluntarily Scheduled Resource Providers* for aggregating *voluntarily scheduled resources* in accordance with clause 3.8.3 (including that aggregated *voluntarily scheduled resources* must all be within the same zone);
 - (3) guidance for *Voluntarily Scheduled Resource Providers* on processes for the aggregation of *voluntarily scheduled resources* into the zones determined under subparagraph (1); and
 - (4) validation processes for *AEMO*.
- (d) In developing the *voluntarily scheduled resource guidelines*, *AEMO* must have regard to:

 - (1) the need to balance costs of participation for *voluntarily scheduled resources* in *central dispatch* with *AEMO*'s costs for facilitating participation by *voluntarily scheduled resources* in *central dispatch*;
 - (2) the need for ease of participation in *central dispatch* for *voluntarily scheduled resources*;
 - (3) the need for restrictions on *voluntarily scheduled resources* in *central dispatch* to apply only to the extent reasonably necessary for *AEMO* to manage *power system security* and *reliability*; and
 - (4) any other matter determined by *AEMO*, acting reasonably, and which must be specified by *AEMO* in the *voluntarily scheduled resource guidelines*.
- (e) At least once every two years, *AEMO* must review the *voluntarily scheduled resource guidelines* and, if at the conclusion of that review, *AEMO* considers that changes are necessary or desirable, *AEMO* must amend the *voluntarily scheduled resource guidelines* in accordance with the *Rules consultation procedures*.

3.10A.4 Voluntarily scheduled resource incentive mechanism

Definitions

(a) In this clause:

incentive MW price cap is the price (in \$/MW) that equals half of the VSR Benefits (calculated in \$/MW) that AEMO expects will accrue from successful VSR incentive mechanism participants participating in central dispatch, in relation to a particular VSR tender process.

incentive period means the period between 1 January 2027 until 31 December 2031.

Intending VSRP means a Market Participant with one or more qualifying resources that it intends to nominate as a voluntarily scheduled resource in accordance with clause 3.10A.1 if it is successful in a VSR tender process.

participation payment means the amount (in \$) payable under a VSR participation agreement.

participation price means the amount (in \$/MW) payable under a VSR participation agreement, which is to be determined in accordance with paragraph (g)(1).

VSR Benefits means the expected benefits to consumers of voluntarily scheduled resources participating in central dispatch, including where the participation results in reduced system security services costs, avoided generation, avoided greenhouse gas emissions and reduced RERT costs.

VSR incentive mechanism participant means either:

- (1) a Voluntarily Scheduled Resource Provider; or
- (2) an Intending VSRP,

who satisfies the criteria for participating in the VSR incentive mechanism specified in the VSR incentive procedures and submits an offer in a VSR tender process.

VSR incentive objective is to maximise VSR Benefits by incentivising Market Participants with qualifying resources to nominate those resources as voluntarily scheduled resources, while minimising the cost of facilitating participation through participant payments.

VSR incentive principles means the principles for the VSR incentive mechanism listed in paragraph (f).

VSR tender process means a process, run by AEMO under this clause, for receiving and considering offers from VSR incentive mechanism participants.

VSR incentive mechanism

The mechanism constituting two or more VSR tender processes run by AEMO under clause 3.10A.4, to incentivise Market Participants with qualifying resources to participate in central dispatch.

VSR incentive procedures

The procedures made by AEMO under clause 3.10A.4(d) for the VSR incentive mechanism.

VSR participation agreement

A contract between AEMO and a successful VSR incentive mechanism participant described in clause 3.10A.4(j).

Design and conduct of VSR incentive mechanism

- (b) During the incentive period, AEMO must conduct at least two VSR tender processes to determine which VSR incentive mechanism participants will receive participation payments.
- (c) The VSR incentive mechanism must be conducted in accordance with this clause, the VSR incentive objective and the VSR incentive procedures.
- (d) AEMO must develop, publish and maintain, and may amend, VSR incentive procedures in accordance with the Rules consultation procedures and paragraphs (e) and (g).
- (e) The VSR incentive procedures must give effect to the VSR incentive principles and must specify:

 - (1) the criteria which a VSR incentive mechanism participant must satisfy to be eligible to participate in the VSR incentive mechanism, which must include a prohibition on participation by a Voluntarily Scheduled Resource Provider in respect of a voluntarily scheduled resource where that person is, or has been, a party to a VSR participation agreement in respect of that voluntarily scheduled resource;
 - (2) the procedures for conducting the VSR incentive mechanism;
 - (3) the timing of each VSR tender process;
 - (4) the requirements for offers submitted by VSR incentive mechanism participants into a VSR tender process, which must include that offers:

 - (i) are in \$/MW;
 - (ii) are specified to apply for a region;
 - (iii) are specified to apply for particular types of qualifying resources or voluntarily scheduled resources;
 - (iv) specify the proposed term of a VSR participation agreement that would apply if the VSR incentive mechanism participant were successful in the VSR tender process, subject to paragraph (k)(2); and
 - (v) specify the proposed availability of the qualifying resource or voluntarily scheduled resource (as applicable) during the term identified pursuant to subparagraph (iv);
 - (5) the assessment criteria and methodology for selecting successful VSR incentive mechanism participants from each VSR tender process;
 - (6) the procedures and timetable for settling participation payments; and

- (7) the requirements for VSR participation agreements and any standard form VSR participation agreement.
- (f) The VSR incentive principles are that the *VSR incentive mechanism* should be structured and run in a way that achieves the VSR incentive objective, taking into consideration:
- (1) the relative availability of *voluntarily scheduled resources* in regards to expected capacity factors and any planned hibernation requests under clause 3.10A.2;
 - (2) the extent to which each *voluntarily scheduled resource* is expected to vary its *generation* or consumption in response to expected *spot prices*; and
 - (3) the benefits of building capability across a number of *Voluntarily Scheduled Resource Providers* with a variety of *voluntarily scheduled resources* (including in relation to aggregation) in order to have multiple *Voluntarily Scheduled Resource Providers* with a diversity of resources participating in *central dispatch*.

Participation price, incentive MW price cap and participation payments

- (g) The *VSR incentive procedures* must also give effect to the following requirements:
- (1) a participation price must not exceed the incentive MW price cap; and
 - (2) the aggregate of all participation payments payable under all *VSR participation agreements* must not exceed \$50 million.
- (h) Before commencing each VSR tender process, *AEMO* must determine the incentive MW price cap for each *region* and notify this to the *AER* and *AEMC*.
- (i) Except to the extent that paragraph (h) applies, *AEMO*, the *AER* and *AEMC* must keep confidential the incentive MW price cap during the incentive period.

Requirement for VSR participation agreement for successful participants

- (j) Following the completion of a VSR tender process, each successful VSR incentive mechanism participant must enter into a *VSR participation agreement* with *AEMO* under which:
- (1) *AEMO* pays the *Voluntarily Scheduled Resource Provider* the participation payment; and
 - (2) the *Voluntarily Scheduled Resource Provider* participates in *central dispatch*,
- in accordance with the *VSR incentive procedures* and the terms of the *VSR participation agreement*.

Note:

Voluntarily Scheduled Resource Providers may participate in *central dispatch* with a *voluntarily scheduled resource* without a VSR participation agreement.

- (k) A *VSR participation agreement* must:

- (1) if it is with an Intending VSRP, require, as a condition precedent, the Intending VSRP to nominate its *qualifying resource* as a *voluntarily scheduled resource* in accordance with clause 3.10A.1;
 - (2) have a term of at least one year and no more than three years;
 - (3) not have a participation price that exceeds the relevant incentive MW price cap; and
 - (4) not provide for a participation payment to be made until subparagraph (k)(1) is complied with.
- (l) AEMO must not enter into a *VSR participation agreement* with an Intending VSRP or a *Voluntarily Scheduled Resource Provider* that does not satisfy the criteria specified in the *VSR incentive procedures*.
- (m) A *Voluntarily Scheduled Resource Provider* must comply with the *VSR participation agreement*.

Reporting of participation payments after VSR tender processes

- (n) Following the completion of the first VSR tender process, and annually thereafter, AEMO must publish the aggregate amount of all participation payments payable in each *financial year* under *VSR participation agreements*. This obligation continues for every *financial year* in which there is an amount payable under a *VSR participation agreement*.

Cost recovery for expenses administering the VSR incentive mechanism and participation payments

- (o) AEMO must recover its costs and expenses incurred in establishing, administering and conducting the *VSR incentive mechanism* from all *Registered Participants* as part of the fees imposed in accordance with rule 2.11.
- (p) Within 40 *business days* of the completion of each *financial year* in which AEMO made participation payments, AEMO must determine the amount of all participation payments paid in that *financial year* for each *region*.
- (q) The amounts determined under paragraph (p) must be recovered from *Cost Recovery Market Participants* in accordance with paragraph (r).
- (r) Within 40 *business days* of the completion of a relevant *financial year*, AEMO must calculate a figure for each *Cost Recovery Market Participant* in each *region* by applying the following formula in respect of that *financial year*:

$$CRP = \frac{(E_{AC} \times AC)}{\sum E_{AC}}$$

where:

CRP is the amount payable by a *Cost Recovery Market Participant* for a *region* in respect of the *financial year*.

E_{AC} is the sum of the *Cost Recovery Market Participant's* adjusted consumed energy amounts at its market connection points in the *region* in the *financial year*, but excluding any energy consumed by that *Cost Recovery Market Participant's* voluntarily scheduled resources that are the subject of a current *VSR participation agreement*.

$\sum E_{AC}$ = the sum of all amounts determined as “E_{AC}” in respect of that *region* for the relevant *financial year*.

AC = the amount determined by AEMO for the *region* under paragraph (p).

- (s) AEMO must include the amount determined under paragraph (r) for each *Cost Recovery Market Participant* in the next preliminary statement to be provided to each *Cost Recovery Market Participant* under clause 3.15.4 (and in the subsequent *final statement* to be provided under clause 3.15.5).

Reporting after completion of incentive period

- (t) Within 12 months of the completion of the incentive period, AEMO must publish a report which includes:
- (1) a summary of the outcomes from the *VSR incentive mechanism*, including AEMO’s opinion of whether the VSR incentive objective was satisfied;
 - (2) a description of AEMO’s learnings and insights from the *VSR incentive mechanism*;
 - (3) an analysis of the participation prices payable under *VSR participation agreements*;
 - (4) an analysis of the types of *voluntarily scheduled resources* contracted under *VSR participation agreements*;
 - (5) any other information AEMO considers relevant or useful to include.

3.10B Monitoring and reporting of unscheduled price responsive resources

3.10B.1 Definitions

In this rule 3.10B:

forecast deviation means the difference between forecast *load* for a particular *trading interval*, developed for *pre-dispatch* and for *dispatch*, and the actual *load* during that *trading interval*.

unscheduled price responsive resource is a resource that:

- (1) is not a *scheduled resource*;
- (2) is capable of changing output or consumption depending on changes in forecast or actual *spot prices*; and
- (3) includes a *hibernated voluntarily scheduled resource* but not an *inactive voluntarily scheduled resource* or a *voluntarily scheduled resource*.

3.10B.2 AEMO reporting on unscheduled price responsive resources

- (a) The objective of the monitoring and reporting framework established by this clause is for AEMO to:
- (1) monitor and report on the impacts of unscheduled price responsive resources on forecast deviations; and
 - (2) identify *market* outcomes as a result of the use of unscheduled price responsive resources.

Annual reporting

- (b) By 30 September each year, AEMO must prepare and publish, in accordance with the AEMO price responsive reporting guidelines, a report which includes the following information in respect of the previous financial year:
- (1) an analysis of the statistics and trends of:
 - (i) the volumes and types of unscheduled price responsive resources reported by Registered Participants, using the DER register information and demand side participation information;

Note
AEMO must report on demand side participation information, no less than annually, under clause 3.7D(c).
AEMO may use DER register information for the purpose of the exercise of its statutory functions under the NEL or Rules under clause 3.7E(e).
 - (ii) patterns in the use of unscheduled price responsive resources, to the extent identifiable, in response to forecast and actual spot prices; and
 - (iii) the approximate contribution of unscheduled price responsive resources to forecast deviations;
 - (2) AEMO's best estimate of the impact of unscheduled price responsive resources on forecast deviations in relation to additional amounts paid to:
 - (i) Ancillary Service Providers for additional ancillary services that are enabled; and
 - (ii) Cost Recovery Market Participants for ancillary service transaction payments under clause 3.15.6AA; and
 - (3) an assessment of the degree of forecast deviations in regional demand across a range of market conditions, as well as the factors contributing to the size of forecast deviation;
 - (4) analysis of impacts of unscheduled price responsive resources on the load forecast used by AEMO for pre-dispatch and dispatch, including in comparison with outcomes published in previous reports prepared in accordance with this clause (as applicable);
 - (5) identification of additional information or inputs required to improve or account for unscheduled price responsive resources in load forecasts; and
 - (6) a description of any actions taken by AEMO to reduce forecast deviations by accounting for unscheduled price responsive resources that have resulted in improved market outcomes;
 - (7) a description of:
 - (i) the methodologies used by AEMO to consider and manage the impacts of unscheduled price responsive resources on load forecasts for pre-dispatch and dispatch; and
 - (ii) any barriers to AEMO using those methodologies to improve forecasting; and
 - (8) any other relevant information AEMO considers necessary or convenient to include in the report.

Quarterly data

- (c) AEMO must develop, publish and maintain a single source of information for unscheduled price responsive resources that presents the information and metrics specified by the AEMO price responsive reporting guidelines.

- (d) AEMO must update the information published under paragraph (c) when new information becomes available and at least once each calendar quarter.

AEMO price responsive reporting guidelines

- (e) AEMO must develop and publish, and may amend, the AEMO price responsive reporting guidelines in accordance with the Rules consultation procedures.
- (f) The AEMO price responsive reporting guidelines must specify:
- (1) how AEMO will meet its reporting obligations under paragraphs (b); and
 - (2) the information and metrics that AEMO will include in the dashboard reporting required pursuant to paragraph (c).
- (g) In satisfying its obligations under paragraphs (b) and (c), AEMO may:
- (1) utilise existing AEMO monitoring and reporting frameworks under the Rules;
 - (2) utilise data, reports and systems otherwise available to AEMO; and
 - (3) take into account or include any other information that AEMO reasonably considers relevant to meet the objective set out in paragraph (a).

3.10B.3 AER analysis of impacts of unscheduled price responsiveness resources

Introduction

- (a) The objective of the monitoring and reporting framework established by this clause is for the AER, as part of the AER wholesale market and monitoring and reporting functions under section 18C of the NEL, to provide transparency on the impacts of unscheduled price responsive resources on efficient market outcomes to inform future market reform.

Annual reporting

- (b) By 31 December each year, the AER must prepare and publish an annual report in respect of the previous financial year in accordance with the AER price responsive reporting guidelines.
- (c) The report prepared under paragraph (b) must analyse the impact of unscheduled price responsive resources on forecast deviations, and the consequential impacts on the efficiency of the market, including in relation to:
- (1) additional amounts paid to Generators, Integrated Resource Providers and Demand Response Service Providers for different quantities and prices of electricity and wholesale demand response that are dispatched;
 - (2) estimates of the costs incurred by Generators, Integrated Resource Providers and Demand Response Service Providers for different quantities and prices of electricity and wholesale demand response that are dispatched;
 - (3) additional amounts paid to:
 - (i) Ancillary Service Providers for additional market ancillary services that are enabled; and
 - (ii) Cost Recovery Market Participants for ancillary service transaction payments under clause 3.15.6AA;

- (4) additional amounts paid under the RERT for scheduled reserves that are dispatched and unscheduled reserves that are activated; and
- (5) additional greenhouse gas emissions resulting from the relative increases referred to in subparagraphs (1) to (4);

and must also include:

- (6) identification of trends and outcomes on the efficiency of the market as a result of the matters set out in this paragraph when compared to previous financial years (as applicable);
- (7) the AER's recommendations for how to improve the efficiency of the market in respect of the matters set out in this paragraph; and
- (8) any other relevant information the AER considers necessary or convenient to include in the report.

- (d) In satisfying its obligations under paragraph (b), the AER may utilise existing frameworks under the Rules and NEL in respect of AER wholesale market monitoring functions, AER wholesale market reporting functions and any other reporting frameworks used by the AER.

AEMO to provide the AER with information

- (e) To the extent the AER considers it reasonably necessary to satisfy its obligations under paragraph (b), the AER may request AEMO to provide:
 - (1) confidential information received by AEMO from Registered Participants relating to unscheduled price responsive resources;
 - (2) information about forecast deviations and the contribution of unscheduled price responsive resources to those forecast deviations; and
 - (3) any other information, data or analysis from AEMO that the AER considers relevant.
- (f) AEMO must comply with a request from the AER under paragraph (e).

AER price responsive reporting guidelines

- (g) Subject to paragraph (i), the AER must develop and publish, and may amend, the AER price responsive reporting guidelines in accordance with the Rules consultation procedures.
- (h) The AER price responsive reporting guidelines must specify how the AER will meet its monitoring and reporting obligations under paragraph (b).
- (i) The AER may include the AER price responsive reporting guidelines as part of the wholesale market monitoring guidelines, in which case, the AER must consult on the amendment of the wholesale market monitoring guidelines in accordance with clause 8.7.2 (and the Rules consultation procedures do not apply).

3.11 Ancillary Services

3.11.2 Market ancillary services

- (a) The market ancillary services are:

- (1) the *fast raise service*;
 - (2) the *fast lower service*;
 - (3) the *slow raise service*;
 - (4) the *slow lower service*;
 - (5) the *regulating raise service*;
 - (6) the *regulating lower service*;
 - (7) the *delayed raise service*;
 - (8) the *delayed lower service*;
 - (9) the *very fast raise service*; and
 - (10) the *very fast lower service*.
- (b) AEMO must make and *publish* a *market ancillary service specification* containing:
- (1) a detailed description of each kind of *market ancillary service*; and
 - (2) the performance parameters and requirements which must be satisfied in order for a service to qualify as the relevant *market ancillary service* and also when a *Market Participant* provides the relevant kind of *market ancillary service*.
- (c) AEMO may amend the *market ancillary service specification*, from time to time.
- (d) AEMO must comply with the *Rules consultation procedures* when making or amending the *market ancillary service specification*.
- (e) An amendment to the *market ancillary service specification* must not take effect until at least 30 days after the amendment has been *published*.
- (f) In addition to the requirements under rule 4.15, an *Ancillary Service Provider* must install and maintain in accordance with the standards referred to in clause 3.11.2(g) monitoring equipment to monitor and record the response of its *ancillary service unit* to changes in the *frequency* of the *power system*.

Note

This paragraph is classified as a tier 2 civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (g) AEMO must develop, and may amend from time to time, standards which must be met by *Ancillary Service Providers* in installing and maintaining the equipment referred to in paragraph 3.11.2(f).
- (h) AEMO may request an *Ancillary Services Provider* to provide to AEMO a report detailing how the relevant *ancillary service unit* responded to a particular change or particular changes in the *frequency* of the *power system*. An *Ancillary Service Provider* must provide a report requested under this paragraph 3.11.2(h) promptly but, in any event, in no more than 20 *business days* after notice to do so.
- (i) AEMO may from time to time require an *Ancillary Service Provider* to demonstrate the relevant *ancillary service unit's* capability to provide the

market ancillary service to the satisfaction of *AEMO* according to standard test procedures. An *Ancillary Service Provider* must promptly comply with a request by *AEMO* under this clause.

3.13 Market Information

3.13.3 Standing data

- (a) *AEMO* must establish, maintain, update and *publish*:
- (1) a list of all of the *Market Participants* and a list of all applications to become a *Market Participant*, including *bid valuation data*;
 - (2) a list of all of the *Market Participants* who will cease to be *Market Participants* and the time that each listed *Market Participant* will cease to be a *Market Participant*;
 - (2A) a list of the *expected closure years* and *closure dates* for all *scheduled generating units*, *semi-scheduled generating units* and *scheduled bidirectional units* notified under clauses 2.1B.3 and 2.10.1(c1), and make such information available on *AEMO's* website;
 - (3) a list of all of the *Market Participants* who are or are going to be suspended and the time at which each listed *Market Participant* was suspended or will be suspended.
- (b) A *Market Participant* must provide *AEMO* the *bid validation data* relevant to each of its *scheduled resources* and *ancillary service units* in accordance with schedule 3.1.

Note

This paragraph is classified as a tier 2 civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b1) In addition to the information provided to *AEMO* in paragraph (b), where a *scheduled resource* has been aggregated under clause 3.8.3, the *Market Participant* in respect of the *scheduled resource* must provide to *AEMO*, as applicable:
- (1) the maximum *generation* to which each individual *scheduled generating unit*, *semi-scheduled generating unit* or *scheduled bidirectional unit* may be *dispatched*;
 - (1A) the maximum level of consumption to which each individual *scheduled bidirectional unit* may be *dispatched*;
 - (2) the number of individual *scheduled loads* that have been aggregated in accordance with clause 3.8.3;
 - (3) the number of *scheduled network services* that have been aggregated in accordance with clause 3.8.3; ~~or~~
 - (4) the number of individual *wholesale demand response units* that have been aggregated in accordance with clause 3.8.3; or
 - (5) the number of individual voluntarily scheduled resources that have been aggregated as a single voluntarily scheduled resource in accordance with clause 3.8.3.

Note

This paragraph is classified as a tier 2 civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) All *Market Participants* will be required to provide *AEMO* with information as set out below:
 - (1) forecasts for *connection points* as prescribed in clause 5.11.1; and
 - (2) metering information for *settlements* purposes as prescribed in Chapter 7.

Note

This paragraph is classified as a tier 2 civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (d) *Network Service Providers* are to maintain a register of data provided by *Market Participants* for planning and design purposes in accordance with schedule 5.7 of Chapter 5 and are to provide a copy of this register of data to *AEMO* on request and in a form specified by *AEMO*.
- (e) *Network Service Providers* must, without delay, notify and provide *AEMO* with details of any additions or *changes* to the register of data described in clause 3.13.3(d).
- (f) Each year, by a date to be specified by *AEMO*, *Network Service Providers* must provide *AEMO* with the following information:
 - (1) expected *network capability* under normal, *outage* and emergency conditions;
 - (2) electrical data sufficient to allow *power system* modelling under steady state and dynamic conditions, this data to be made available in hard copy and an acceptable industry standard electronic format approved by *AEMO*; and
 - (3) operating procedures and practices for *network* operation and maintenance.
- (g) *Network Service Providers* must notify *AEMO* of any changes to the information provided under clause 3.13.3(f) as soon as practicable.
- (h) *Market Participants* must notify *AEMO* of any changes to *bid validation data* 6 weeks prior to the implementation of planned changes and without unreasonable delay in the event of unplanned changes.

Note

This paragraph is classified as a tier 2 civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (i) *Network Service Providers* must notify *AEMO* of any changes or additions to technical data one month prior to the implementation of planned changes and without unreasonable delay in the event of unplanned changes.

Note

This paragraph is classified as a tier 2 civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (j) *AEMO* must conduct an annual review of *bid validation data* in consultation with the relevant *Market Participants*, who must advise *AEMO* of any required changes to the data.
- (k) A *Registered Participant* may request from *AEMO*:
 - (1) *bid validation data*;
 - (2) information that is reasonably required by the *Registered Participant* to carry out *power system* simulation studies (including load flow and dynamic simulations) for planning and operational purposes; and
 - (3) operation and maintenance procedures and practices for *transmission network* or *distribution network* operation, developed for the purposes of schedule 5.1 sufficient to enable the *Registered Participant* to carry out *power system* modelling under normal, *outage* and emergency conditions.

Note

In accordance with clause 3.13.3AA, *project developers* may request from *AEMO* the information set out in clauses 3.13.3(k)(1)-(3) and must treat such information as *confidential information* under clause 3.13.3(l).

- (k1) *AEMO* must set out in the *Power System Model Guidelines* the circumstances in which *AEMO* will consider the information under paragraph (k)(2) to be reasonably required by a *Registered Participant*.
 - (l) If *AEMO* holds information requested under clause 3.13.3(k), *AEMO* must provide the requested information to the *Registered Participant* as soon as practicable, subject to the following requirements:
 - (1) If *AEMO* holds and is required under this paragraph (l) to provide a *releasable user guide* that *AEMO* received under clause S5.2.4(b)(8), *AEMO* must provide the *releasable user guide* to the *Registered Participant* in an unaltered form.
 - (2) If *AEMO* holds and is required under this paragraph (l) to provide a form of the model source code that *AEMO* received under clauses S5.2.4(b)(6) and S5.2.4(d) or from any other source, *AEMO* must provide that information:
 - (i) only in the form of, at *AEMO's* discretion:
 - (A) compiled information (such as, for example, compiled Fortran code in object code or dynamic link library (DLL) form);
 - (B) encrypted information; or
 - (C) a secured format agreed by the provider of the model source code,
- unless *AEMO* has the written consent of the person who provided the information to *AEMO* to provide it in another form; and

- (ii) in a form that can be interpreted by a software simulation product nominated by *AEMO*.
- (3) Any information provided by *AEMO* under clause 3.13.3(l) to a *Registered Participant* must be treated as *confidential information*.
- (4) Any information provided by *AEMO* under this clause 3.13.3(l) to a person who is a *project developer* must be treated by that person as *confidential information* even where that person ceases to be a *project developer*.
- (11) *AEMO* may charge a fee, except where the information is requested by a *Network Service Provider* under clause 3.13.3(15), to recover all reasonable costs incurred in providing information to a *Registered Participant* under this clause 3.13.3.
- (12) For the purposes of clause 3.13.3(l), the provider of the model source code is:
 - (1) the *Generator* or *Integrated Resource Provider* (or the person required under the *Rules* to register as such) if the model source code was received from that person under clause S5.2.4(b)(6) or S5.2.4(d); or
 - (2) **[Deleted]**
 - (3) the *Generator* or *Integrated Resource Provider*, if the model source code was provided to *AEMO* by a *Network Service Provider* and that same *Network Service Provider* advises *AEMO* that the provider of the model source code is the *Generator* or *Integrated Resource Provider*; or
 - (4) the relevant *Network Service Provider*, if that same *Network Service Provider* advises *AEMO* that the provider of the model source code is itself; or
 - (5) otherwise, the relevant *Transmission Network Service Provider*.
- (13) If *AEMO* is required under clause 3.13.3(l) to provide information requested under clause 3.13.3(k)(2), *AEMO* may provide:
 - (1) historical information relating to the operating conditions of the *power system*;
 - (2) information and data provided to *AEMO* under clauses 3.13.3(f)(1) and 3.13.3(f)(3) and information of the same type provided under clause 3.13.3(g);
 - (3) *network* dynamic model parameter values obtained under clauses 3.13.3(f)(2) and 3.13.3(g);
 - (4) model parameter values and load flow data derived from a *releasable user guide*;
 - (5) a *network* model of the *national grid*, suitable for load flow and fault studies; and
 - (6) other technical data as listed in Schedules 5.5.3 and 5.5.4.
- (14) Despite clause 3.13.3(l), *AEMO* must not provide information relating to *plant* that is the subject of an *application to connect* or a *connection agreement*, until the earlier of:

- (1) the date when a *connection agreement* relating to that *plant* is executed;
or
 - (2) three months before the proposed start of commissioning of that *plant*.
- (15) Subject to clause 3.13.3(16), if a *Transmission Network Service Provider* is responsible for provision of *network* limit advice relating to *power system* stability limits to *AEMO* under clause S5.1.2.3, *AEMO* must, on request from that *Transmission Network Service Provider*, provide all *power system* and *generating system* or *integrated resource system* model information that is reasonably required for planning and operational purposes, if *AEMO* holds that information, including:
- (1) functional block diagram information, including information provided to *AEMO* under clause S5.2.4(b)(5);
 - (2) *generating unit*, *generating system bidirectional unit*, *integrated resource system* and *power system* static and dynamic model information, including model parameters and parameter values; and
 - (3) information provided to *AEMO* in accordance with clause S5.2.4(a).
- (16) If *AEMO* is required to provide information to a *Transmission Network Service Provider* under paragraph (15), this must not include:
- (1) model source code provided to *AEMO* under clauses S5.2.4(b)(6) and S5.2.4(d), except as allowed under clause 3.13.3(1); and
 - (2) information relating to *plant* that is the subject of an *application to connect* until after the execution of the relevant *connection agreement*.
- (17) Any information provided by *AEMO* under clause 3.13.3(15) to a *Transmission Network Service Provider* must be treated as *confidential information*.
- (m) Where special approvals or exemptions have been granted by *AEMO*, including approval under clause 3.8.3 to aggregate for *central dispatch*, or exemptions from *central dispatch*, details of such special arrangements must be *published* by *AEMO*.
- (n) *AEMO* must determine and *publish intra-regional loss factors* in accordance with clause 3.6.2 by 1 April each year and whenever changes occur.
- (o) *Network Service Providers* must advise *AEMO* of their *distribution loss factors*, duly authorised by the *AER*, and *AEMO* must *publish* such *distribution loss factors* in accordance with clause 3.6.3(i).
- (p) *AEMO* must *publish* on a quarterly basis details of:
- (1) *interconnector* transfer capability; and
 - (2) the discrepancy between *interconnector* transfer capability and the capacity of the relevant *interconnector* in the absence of *outages* on the relevant *interconnector* only,
- for each day of the preceding quarter for all *interconnectors*.
- (p1) *AEMO* must establish, maintain and *publish* a register which identifies:

- (1) the *Registered Participant* to whom any information is provided under clause 3.13.3(l), including whether the *Registered Participant* is a *project developer*; and
- (2) the date on which such information was provided.
- (q) In relation to the *declared transmission system* of an *adoptive jurisdiction*:
 - (1) *AEMO* must maintain the register referred to in paragraph (d); and
 - (2) a *declared transmission system operator* must provide *AEMO* with information reasonably required by *AEMO* for maintaining the register and keeping it up to date.

3.13.4 Spot market

- (a) Each week, in accordance with the *timetable*, *AEMO* must *publish* details of the outputs of the *medium term PASA*.
- (b) The details to be *published* by *AEMO* under clause 3.13.4(a) must include the information specified in clause 3.7.2(f).
- (c) Each *day*, in accordance with the *timetable*, *AEMO* must *publish* details of the outputs of the *short term PASA* for each *30-minute period* covered.
- (d) The details of the *short term PASA published* each *day* by *AEMO* under clause 3.13.4(c) must include the information specified in clause 3.7.3(h).

[ERC0332 - 31 July 2025](#)

In clause 3.13.4(d), omit "clause 3.7.3(h)" and substitute "clause 3.7.3(k)".

- (e) Each *day*, in accordance with the *timetable*, *AEMO* must *publish* a half hourly *pre-dispatch schedule* for the period described in clause 3.8.20(a).
- (f) Subject to clause 3.8.20(b), details of the *pre-dispatch schedule* to be *published* must include the following for each *trading interval* or *30-minute period* (as applicable) in the period covered:
 - (1) forecasts of the most probable *peak load* for the total *power system* taking into account the most probable availability of *wholesale demand response units* plus required *scheduled reserve* for each *region* and for the total *power system*;
 - (2) forecasts of the most probable *energy* consumption for each *region* and for the total *power system*;
 - (3) forecast *inter-regional loss factors*;
 - (4) aggregate *generating plant* and *bidirectional unit* availability for each *region* and aggregate availability of each type of *market ancillary service* for each *region*;
 - (5) projected *supply* surpluses and deficits for each *region*, including shortages of *scheduled reserve* and projected *market ancillary service* surpluses and deficits for each *region*;
 - (5A) the aggregated MW allowance (if any) made by *AEMO* for *generation* from *non-scheduled generating systems* and *non-scheduled integrated resource systems* in each forecast under:

- (i) subparagraphs (f)(1), (f)(2) and (f)(3); and
 - (ii) **[Deleted]**
 - (iii) **[Deleted]**
 - (iv) subparagraph (f)(5), but not including shortages of *scheduled reserve* or projected *market ancillary service* surpluses and deficits for each *region*.
- (5B) in respect of each forecast referred to in:
- (i) subparagraphs (f)(1), (f)(2) and (f)(3); and
 - (ii) **[Deleted]**;
 - (iii) **[Deleted]**;
 - (iv) subparagraph (f)(5), but not including shortages of *scheduled reserve* or projected *market ancillary service* surpluses and deficits for each *region*,
a value that is the sum of that forecast and the relevant aggregated MW allowance (if any) referred to in clause 3.13.4(f)(5A); and
- (6) identification and quantification of:
- (i) where a projected *supply* deficit in one *region* can be supplemented by a surplus in a neighbouring *region* (dependent on forecast *interconnector* capacities) and the expected *interconnector flow*;
 - (ii) forecast *interconnector* transfer capabilities and the projected impact of any *inter-network tests* on those transfer capabilities; and
 - (iii) when and where *network constraints* may become binding on *dispatch*.
- (g) Each *day*, in accordance with the *timetable*, *AEMO* must *publish* forecasts of *spot prices* and *ancillary service prices* at each *regional reference node* for each *trading interval* or *30-minute period* (as applicable) of the period described in clause 3.8.20(a), with such forecasts being based on the *pre-dispatch schedule* information.
- (h) Together with its forecast *spot prices*, *AEMO* must *publish* details of the expected sensitivity of the forecast *spot prices* for each *30-minute period* to changes in the forecast *load* or *generating unit* or *bidirectional unit* availability.
- (h1) Together with its forecast *spot prices*, *AEMO* may *publish* details of the expected sensitivity of the forecast *spot prices* for each *trading interval* to changes in the forecast *load* or *generating unit* or *bidirectional unit* availability.
- (i) In accordance with the *timetable* or more often if there is a change in circumstances which in the opinion of *AEMO* results in a significant change in forecast *spot price*, or in any event no more than 3 hours after the previous such publication, *AEMO* must prepare and *publish* updated *pre-dispatch*

schedules and spot price forecasts, including the details specified in clause 3.13.4(f).

- (j) If *AEMO* considers there to be a significant change in a forecast *spot price*, *AEMO* must identify and *publish* the cause of such a change in terms of the aggregate *supply* and demand situation and any *network constraints* in or between the affected *region(s)*.
- (k) *AEMO* must specify and *publish* its criteria for a significant change in forecast *spot price* for the purposes of activating an update in the *published* forecasts.
- (l) Within 5 minutes of each time *AEMO* runs the *dispatch algorithm*, *AEMO* must *publish* the *spot price* for each *regional reference node* calculated in accordance with clause 3.9.2 and the *ancillary service price* for each *market ancillary service* for each *regional reference node* calculated in accordance with clause 3.9.2A.
- (11) In addition to the *spot price*, *AEMO* must publish a *30-minute price* for a *regional reference node* for each *30-minute period*.
- (m) Within 5 minutes of the conclusion of each *trading interval*, *AEMO* must *publish* the *regional reference prices* for each *region* for that *trading interval*.
- (n) Each *day*, in accordance with the *timetable*, *AEMO* must *publish* the actual *regional reference prices*, *ancillary service prices*, *MW load* and *generation* for each *region* and the *power system*, *inter-regional loss factors* and details of any *network constraints* for each *trading interval* in the previous *trading day*.
- (n1) In accordance with the *timetable*, *AEMO* must *publish* the *inter-regional flows*.
- (o) **[Deleted]**
- (p) Each *day*, in accordance with the *timetable*, *AEMO* must *publish* details of final *dispatch bids* and *market ancillary service bids* received and actual availabilities of *scheduled resources* and *market ancillary services* for the previous *trading day*, including:
 - (1) the number and times at which *rebids* were made, and the reason provided by the relevant *Market Participant* for each *rebid* under clause 3.8.22(c)(2);
 - (2) identification of the *Market Participant* submitting the *dispatch bid*, or *market ancillary service bid*;
 - (3) the *dispatch bid prices*;
 - (4) quantities for each *trading interval*;
 - (5) the telemetered *ramp rate* of each *generating unit*, *bidirectional unit*, *scheduled load* and *scheduled network service*;
 - (6) identification of *trading intervals* for which the *plant* was specified as being *inflexible* in accordance with clause 3.8.19 and the reasons provided by the relevant *Market Participant* in accordance with clause 3.8.19(b)(1);

- (7) in respect of a *semi-scheduled generating unit*, the availability of that *generating unit* specified in the relevant *unconstrained intermittent generation forecast* for each *trading interval*; ~~and~~
- (8) in respect of *semi-scheduled generating units*, the aggregate of the availability of the *semi-scheduled generating units* referred to in subparagraph (7) in respect of each *region* for each *trading interval*;

Inserted by ERC0295 on 1 July 2025:

- (9) in respect of a:
 - (1) *scheduled bidirectional unit*, excluding a *pumped hydro production unit*; ~~and~~
 - (2) *a voluntarily scheduled resource to the extent the qualifying resource is a market bidirectional unit that is a non-scheduled bidirectional unit*.
- ~~the actual state of charge in each *trading interval* in respect of each *dispatchable unit identifier*.~~

- (q) Each *day*, in accordance with the *timetable*, *AEMO* must *publish* details of:
 - (1) for each *scheduled resource*, *dispatched generation*, *dispatched wholesale demand response*, *dispatched network service* or *dispatched load* (as applicable) in each *trading interval*;
 - (2) for each *semi-scheduled generating unit* in each *trading interval*, whether or not a condition for setting a *semi-dispatch interval* applied, for the previous *trading day*.
- (r) In accordance with the *timetable*, *AEMO* must *publish* details of:
 - (1) actual *generation* for each *scheduled generating unit*, *semi-scheduled generating unit* and *non-scheduled generating unit* or *non-scheduled generating system*;
 - (1A) actual *generation* for each *scheduled bidirectional unit* and *non-scheduled bidirectional unit* or *non-scheduled integrated resource system*;
 - (2) actual *network service* for each *scheduled network service*; and
 - (3) actual *load* for each *scheduled bidirectional unit* and *scheduled load*.
- (s) Where *AEMO* *publishes* details as referred to in clause 3.13.4(r), the requirement to *publish* applies only to data available to *AEMO*.
- (t) *AEMO* may, in *publishing* the details referred to in clause 3.13.4(s), *publish* aggregated information of actual *generation* for *non-scheduled generating units* or *non-scheduled generating systems* that have a *nameplate rating* that is less than 30 MW or *non-scheduled bidirectional units* or *non-scheduled integrated resource systems* that have a *nameplate rating* that is less than 5 MW..
- (u) Each time *AEMO* runs the *dispatch algorithm* it must, within 5 minutes, *publish* for the relevant *trading interval*:

- (1) details of any MW allowance made by *AEMO* for *generation* from *non-scheduled generating systems* or *non-scheduled integrated resource systems* in its forecast regional demand;
 - (2) for each *regional reference node* the sum of the actual *generation* for each *non-scheduled generating unit* or *non-scheduled generating system*, *non-scheduled generating system*, *non-scheduled bidirectional unit* or *non-scheduled integrated resource system*; and
 - (3) for each *regional reference node*, a value that is the sum of the MW *load* for the relevant *region* used by *AEMO* in its *dispatch algorithm* to calculate the *spot price* referred to in clause 3.13.4(l) and the sum of the actual *generation* referred to in clause 3.13.4(u)(2).
- (v) Where *AEMO* publishes the information referred to in clause 3.13.4(u), the requirement for *AEMO* to *publish* applies only to data available to *AEMO*.
 - (w) Each *day*, in accordance with the *timetable*, *AEMO* must *publish* details of any operational irregularities arising on the previous *trading day* including, for example, any circumstances in which there was *prima facie* evidence of a failure to follow *dispatch instructions*.
 - (x) Each *trading interval*, *AEMO* must, for each *regional reference node*, *publish* the demand for that *trading interval*, both inclusive and exclusive of the aggregate actual *generation* from *non-scheduled generating systems* and *non-scheduled integrated resource systems*.
 - (y) In accordance with the *timetable* and no more than 3 hours after the last such notification, *AEMO* must notify electronically on a confidential basis each *Semi-Scheduled Generator* of the *unconstrained intermittent generation forecast* for its *semi-scheduled generating units* that was taken into account for each *trading interval* of the last *pre-dispatch schedule* published by *AEMO* under paragraph (e).
 - (z) At intervals to be determined by *AEMO* under rule 3.7A(e), *AEMO* must, in accordance with the *timetable*, *publish* updates to the *congestion information resource*.

3.14 Administered Price Cap and Market Suspension

3.14.5A Payment of compensation due to market suspension pricing schedule periods

Compensation - objective

- (a) The objective for the payment of compensation under this clause 3.14.5A and clause 3.14.5B is to maintain the incentive for:
 - (1) *Scheduled Generators*—~~and~~, *Scheduled Integrated Resource Providers* and *Voluntarily Scheduled Resource Providers* to supply energy;
 - (2) *Ancillary Service Providers* to supply *market ancillary services*; and
 - (3) *Demand Response Service Providers* to supply *wholesale demand response*,

during *market suspension pricing schedule periods*.

Payment to Market Suspension Compensation Claimants

- (b) Subject to paragraph (c), *AEMO* must pay compensation to *Market Suspension Compensation Claimants* calculated in accordance with paragraph (d) and clause 3.14.5B (as the case may be).
- (c) For the purpose of clauses 3.15.8A and 3.15.10C, the amount of compensation due to a *Market Suspension Compensation Claimant* pursuant to paragraph (b) must include interest on that amount computed at the average *bank bill rate* beginning on the day on which payment was required to be made under clauses 3.15.16 and 3.15.17 in respect of the *final statement* for the *billing period* in which the *market suspension pricing schedule period* occurred and ending on the day on which payment is required to be made pursuant to clause 3.15.10C.
- (d) Subject to clause 3.14.5B, the compensation payable to each *Market Suspension Compensation Claimant* is to be determined in accordance with the formula set out below:

$$C = CO - RE$$

where:

C = the amount of compensation the *Market Suspension Compensation Claimant* is entitled to receive.

CO = the costs the *Market Suspension Compensation Claimant* is deemed to have incurred during the *market suspension pricing schedule period*, to be determined in accordance with the formula set out below:

$$CO = (SOG \times BVG) + (MWE \times BVAS) + (MWDR \times BVDR)$$

where:

SOG = the sum of the *Market Suspension Compensation Claimant's sent out generation* (in MWh) during the *market suspension pricing schedule period*.

BVG = the amount (in \$/MWh) calculated in accordance with paragraph (e) below.

MWE = the sum of the relevant *market ancillary services* (in MW) which the *Market Suspension Compensation Claimant's ancillary service unit* has been enabled to provide during the *market suspension pricing schedule period*.

- BVAS = the amount (in \$/MWh) calculated in accordance with paragraph (f) below.
- MWDR = the sum of the *wholesale demand response settlement quantities* of the *Market Suspension Compensation Claimant* (in MWh) during the *market suspension pricing schedule period*.
- BVDR = the amount (in \$/MWh) calculated in accordance with paragraph (f1) below.

RE = the sum of the *trading amounts* determined pursuant to clauses 3.15.6 and 3.15.6A payable to the *Market Suspension Compensation Claimant* during the *market suspension pricing schedule period*,

and where C is a negative number, it will be deemed to be zero.

If a quantity of energy is both *sent out generation* and *wholesale demand response*, it must be included in the calculation of MWDR and not SOG.

- (e) The benchmark value for *generation* (BVG) at paragraph (d) is to be determined in accordance with the formula set out below and the *market suspension compensation methodology* developed under paragraph (h):

$$BVG = BC_{(av)} \times 1.15$$

where:

$BC_{(av)}$ = the capacity-weighted average of the benchmark costs (BC) (in \$/MWh) of all *Scheduled Generators* and *Scheduled Integrated Resource Providers* in the same class and same *region* as the *Market Suspension Compensation Claimant*, with each benchmark cost to be determined in accordance with the formula below:

$$BC = (FC \times E) + VOC$$

where:

FC = the fuel cost (in \$/GJ) for the relevant *Scheduled Generator* or *Scheduled Integrated Resource Provider*.

E = the efficiency (in GJ/MWh) for the relevant *Scheduled Generator* or *Scheduled Integrated Resource Provider*.

VOC = the variable operating cost (in \$/MWh) for the relevant *Scheduled Generator* or *Scheduled Integrated Resource Provider*.

In each case, the above inputs (FC, E and VOC) are to be the same as the equivalent inputs published in the *ISP database*. If there is no equivalent input for "FC" or "E", it will be deemed to be 1. If there is no equivalent input for "VOC", it will be deemed to be zero.

- (f) The benchmark value for *market ancillary services* (BVAS) at paragraph (d) is to be determined in accordance with the formula below:

$$BVG = BC_{(av)} \times \left(\frac{0.15}{n} \right)$$

where:

$BC_{(av)}$ has the same meaning as in paragraph (e) above.

n means the number of *trading intervals* within a one hour period.

- (f1) The benchmark value for *wholesale demand response* (BVDR) at paragraph (d) is to be determined in accordance with the formula below:

$$BVDR = BCE_{(av)} \times 1.15$$

where:

$BCE_{(av)}$ means the value of $BC_{(av)}$ determined under paragraph (e) above (in \$/MWh) for a class of *Scheduled Generator* or *Scheduled Integrated Resource Provider* in the same *region* as the *Market Suspension Compensation Claimant*, as selected by *AEMO* in accordance with the *market suspension compensation methodology*.

- (g) *AEMO* must, in accordance with the *intervention settlement timetable*, advise each *Market Suspension Compensation Claimant* in writing:
- (1) whether the *Market Suspension Compensation Claimant* is entitled to receive compensation pursuant to paragraph (b); and
 - (2) if so, the amount of compensation payable, as calculated in accordance with paragraph (d).

Market suspension compensation methodology and schedule of benchmark values

- (h) *AEMO* must develop, *publish* and make available on its website a methodology (*market suspension compensation methodology*) that specifies:
- (1) the classes of *Scheduled Generator*, *Scheduled Integrated Resource Provider*, *Voluntarily Scheduled Resource Provider* and *Ancillary Service Provider* to be used for the purpose of calculating benchmark values;

- (2) the approach to be adopted by *AEMO* in calculating the benchmark values for each class of *Scheduled Generator*, *Scheduled Integrated Resource Provider*, *Voluntarily Scheduled Resource Provider* and *Ancillary Service Provider* in each *region*, including determining the equivalent inputs published in the *ISP database* for the purpose of the calculation in paragraph (e);
 - (2A) the approach to be adopted by *AEMO* in selecting the class of *Scheduled Generator* or *Scheduled Integrated Resource Provider* to be used when determining the value of $BC_{(av)}$ for the calculation in paragraph (f1); and
 - (3) *AEMO's* administrative fees associated with a claim for compensation under clause 3.14.5B or the manner in which those fees are to be determined.
- (i) *AEMO* may amend the *market suspension compensation methodology* from time to time in accordance with the *Rules consultation procedures*. Notwithstanding this paragraph (i), *AEMO* may make minor and administrative amendments to the *market suspension compensation methodology* without complying with the *Rules consultation procedures*.
 - (j) *AEMO* must develop a schedule of benchmark values (**schedule of benchmark values**) for each class of *Scheduled Generator*, *Scheduled Integrated Resource Provider* and *Ancillary Service Provider* in each *region*, calculated in accordance with the formula set out in paragraphs (e) and (f), and using (where appropriate) the equivalent inputs published in the *ISP database*.
 - (k) *AEMO* must *publish* and make available on its website an updated schedule of benchmark values no later than one month after each publication of the *Inputs, Assumptions and Scenarios Report*.

3.14.5B Claims for additional compensation due to market suspension pricing schedule periods

- (a) Subject to paragraphs (b) and (c), *Market Suspension Compensation Claimants* may, within 15 *business days* of receipt of the notice referred to in clause 3.14.5A(g), make a written submission to *AEMO* claiming an amount equal to the amount by which its direct costs of supplying energy, market ancillary services or wholesale demand response during the *market suspension pricing schedule period* exceed the sum of:
 - (1) any compensation payable to the *Market Suspension Compensation Claimant* under clause 3.14.5A with respect to that *market suspension pricing schedule period*;
 - (2) the *Market Suspension Compensation Claimant's* "RE" as calculated under clause 3.14.5A(d); and
 - (3) any other compensation which the *Market Suspension Compensation Claimant* has received or is entitled to receive in connection with the relevant *generating unit*, ~~or~~ *bidirectional unit* or voluntarily scheduled resource supplying energy or market ancillary services or the relevant

wholesale demand response unit supplying *wholesale demand response* during that *market suspension pricing schedule period*.

- (b) Where a *Market Suspension Compensation Claimant* is a *Directed Participant* with respect to any *trading interval* during a *market suspension pricing schedule period*, such *Market Suspension Compensation Claimant*:
- (1) is entitled to make a claim under clause 3.15.7B(a); and
 - (2) is not entitled to make a claim under this clause 3.14.5B.
- (c) A written submission made by a *Market Suspension Compensation Claimant* pursuant to paragraph (a) must:
- (1) itemise each component of the claim;
 - (2) contain sufficient data and information to substantiate each component of the claim; and
 - (3) be signed by an authorised officer of the *Market Suspension Compensation Claimant* certifying that the written submission is true and correct.
- (d) For the purposes of paragraph (a), the direct costs incurred by the *Market Suspension Compensation Claimant* means, in respect of a *generating unit*, ~~*or bidirectional unit*~~ *or voluntarily scheduled resource* supplying energy or *market ancillary services*:
- (1) fuel costs in connection with the relevant *generating unit*, ~~*or bidirectional unit*~~ *or voluntarily scheduled resource*;
 - (2) incremental maintenance costs in connection with the relevant *generating unit*, ~~*or bidirectional unit*~~ *or voluntarily scheduled resource*;
 - (3) incremental manning costs in connection with the relevant *generating unit*, ~~*or bidirectional unit*~~ *or voluntarily scheduled resource*; and
 - (4) other direct costs reasonably incurred in connection with the relevant *generating unit*, ~~*or bidirectional unit*~~ *or voluntarily scheduled resource*, where such costs are incurred to enable the *generating unit*, ~~*or bidirectional unit*~~ *or voluntarily scheduled resource* to supply energy or *market ancillary services* during the *market suspension pricing schedule period*.
- (d1) For the purposes of paragraph (a), the direct costs incurred by the *Market Suspension Compensation Claimant* means, in respect of a *wholesale demand response unit* supplying *wholesale demand response*:
- (1) fuel costs in connection with the relevant *wholesale demand response unit*;
 - (2) incremental maintenance costs in connection with the relevant *wholesale demand response unit*;
 - (3) incremental manning costs in connection with the relevant *wholesale demand response unit*; and
 - (4) other direct costs reasonably incurred in connection with the relevant *wholesale demand response unit*, where such costs are incurred to enable the *wholesale demand response unit* to supply *wholesale*

demand response during the market suspension pricing schedule period.

- (e) *AEMO may recover from a Market Suspension Compensation Claimant an administrative fee to assist in recouping some of the costs incurred in carrying out its functions under this clause 3.14.5B (which costs may include fees for services rendered by an independent expert under clause 3.12.3). The administrative fees will be determined in accordance with the market suspension compensation methodology developed pursuant to clause 3.14.5A(h).*
- (f) *AEMO:*
 - (1) *may (but is not required to) refer a claim by a Market Suspension Compensation Claimant under paragraph (a) to an independent expert to determine such claim in accordance with clause 3.12.3 where the claim is equal to or greater than \$50,000; and*
 - (2) *must determine in its sole discretion if any claims by a Market Suspension Compensation Claimant made under paragraph (a) and not referred to an independent expert under subparagraph (f)(1) are reasonable, and if so, pay the amount claimed in accordance with clause 3.15.10C,*
in accordance with the intervention settlement timetable.
- (g) *Where AEMO considers a claim made by a Market Suspension Compensation Claimant under paragraph (a) to be unreasonable, it must:*
 - (1) *advise the Market Suspension Compensation Claimant of its determination in writing, setting out its reasons; and*
 - (2) *refer the claim to an independent expert to determine the claim in accordance with clause 3.12.3.*

3.15 Settlements

3.15.3 Connection point and virtual transmission node responsibility

- (a) *For each market connection point there is one person that is financially responsible for that connection point. The person that is financially responsible for such a connection point is:*
 - (1) *the Market Participant which has classified the connection point as a market connection point;*
 - (2) *the Market Participant which has classified the generating unit connected at that connection point as a market generating unit;*
 - (3) *the Market Participant which has classified the network service connected at that connection point as a market network service; ~~or~~*
 - (4) *the Market Participant which has classified the bidirectional unit connected at that connection point as a market bidirectional unit; ~~or~~*
 - (5) *the Market Participant which has nominated the ~~voluntary~~ scheduled qualifying resource at that connection point as a voluntarily scheduled resource.*

- (b) No person is *financially responsible* for a *virtual transmission node* or a *connection point* which connects a *local area* to another part of the *power system*.
- (c) Any difference between:
 - (1) the *energy flow metered* at a *transmission network connection point* that is not a *market connection point*; and
 - (2) the aggregate *loss factor-adjusted metered energy* amounts for all *market connection points* assigned to that *transmission network connection point*,

is to be determined and allocated in accordance with clause 3.15.4 and 3.15.5.

3.15.6AA [Deleted]

[ERC0263 - 8 June 2025](#)

Omit clause 3.15.6AA and substitute:

3.15.6AA Frequency performance payments and cost recovery for regulation services

Definitions

- (a) In this clause:

appropriate metering means metering to allow an eligible unit's individual contribution to the deviation in the *frequency* of the *power system* to be assessed, in accordance with the requirements set out in the frequency contribution factors procedure.

eligible unit means a *scheduled generating unit*, a *semi-scheduled generating unit*, a *scheduled bidirectional unit*, a *scheduled load*, an *ancillary service unit*, a *non-scheduled generating unit*, a *non-scheduled bidirectional unit*, a *voluntarily scheduled resource* or a *market connection point* for a *non-scheduled load*.

frequency contribution factors procedure means the procedure developed and *published* by *AEMO* in accordance with paragraph (f).

Trading amount calculation for frequency performance payments

- (b) In each *trading interval* in relation to:

- (1) each eligible unit which has appropriate metering, an *ancillary services transaction* occurs, which results in a *trading amount* for the relevant *Cost Recovery Market Participant* determined in accordance with the following formula:

$$TA = CF \times \frac{P_{\text{regulation}}}{12} \times RCR$$

for each *trading interval* for each *global market ancillary service requirement* and each *local market ancillary service requirement*, where:

TA (in \$) = the *trading amount* payable or receivable by the *Cost Recovery Market Participant*;

CF (a number) = the contribution factor for the eligible unit determined by *AEMO* under paragraph (e) for the relevant *trading interval* and relevant to the *global market ancillary service requirement* or *local market ancillary service requirement* for *regulating raise service* or *regulating lower service*;

P_{regulation} (in \$ per MW per hour) = the marginal price of meeting the *global market ancillary service requirement* or *local market ancillary service requirement* for the *regulating raise service* or *regulating lower service* in that *trading interval*;

RCR (in MW) = the requirement for corrective response determined by *AEMO* under subparagraph (g)(6)(i).

- (2) each eligible unit which does not have appropriate metering, an *ancillary services transaction* occurs, which results in a *trading amount* for the relevant *Cost Recovery Market Participant* determined in accordance with the following formula:

$$TA = RCF \times \frac{P_{regulation}}{12} \times RCR \times \frac{TE}{ATE}$$

for each *trading interval* for each *global market ancillary service requirement* and each *local market ancillary service requirement*, where:

TA (in \$) = the *trading amount* payable or receivable by the *Cost Recovery Market Participant*;

RCF (a number) = the residual contribution factor for eligible units that do not have appropriate metering, for the relevant *trading interval* and relevant to the *global market ancillary service requirement* or *local market ancillary service requirement* for the *regulating raise service* or *regulating lower service*, having regard to the principle in paragraph (f)(4);

P_{regulation} (in \$ per MW per hour) = has the meaning given in subparagraph (1);

RCR (in MW) = has the meaning given in subparagraph (1);

TE (in MWh) = the sum of the absolute value of any *adjusted gross energy* amount, for the *Cost Recovery Market Participant* for an eligible unit that does not have appropriate metering, for the *trading interval* in the *region* or *regions* relevant to the *global market ancillary service requirement* or *local market ancillary service requirement* for the *regulating raise service* or *regulating lower service*; and

ATE (in MWh) = the aggregate of the absolute value of *adjusted gross energy* amounts for all *Cost Recovery Market Participants*, for eligible units that do not have appropriate metering, for the *trading interval* for the *region* or *regions* relevant to the *global market ancillary service requirement* or *local market ancillary service requirement* for the *regulating raise service* or *regulating lower service*.

Cost recovery for regulation services used

(c) In each *trading interval* in relation to:

- (1) each eligible unit which has appropriate metering, an *ancillary services transaction* occurs, which results in a *trading amount* for the relevant *Cost Recovery Market Participant* determined in accordance with the following formula:

$$TA = TSFCAS \times U \times NCF$$

for each *trading interval* for each *global market ancillary service requirement* and each *local market ancillary service requirement*, where:

TA (in \$) = the *trading amount* payable by the *Cost Recovery Market Participant*;

TSFCAS (in \$) = each amount calculated by *AEMO* under clause 3.15.6A(h)(2) for the *regulating raise service* or the *regulating lower service* in respect of a *trading interval*;

U (a number) = the usage determined by *AEMO* under subparagraph (g)(6)(ii); and

NCF (a number) = the negative contribution factor for the eligible unit determined by *AEMO* under paragraph (e) for the relevant *trading interval* and the *region* or *regions* relevant to the *global market ancillary service requirement* or *local market*

ancillary service requirement for the regulating raise service or regulating lower service.

- (2) each eligible unit for which the *trading amount* is not calculated in accordance with the formula in subparagraph (1), an *ancillary services transaction* occurs, which results in a *trading amount* for the relevant *Cost Recovery Market Participant* determined in accordance with the following formula:

$$TA = TSFCAS \times U \times NRCF \times \frac{TE}{ATE}$$

for each *trading interval* for each *global market ancillary service requirement* and each *local market ancillary service requirement*, where:

TA (in \$) = has the meaning given in subparagraph (1);

TSFCAS (in \$) = has the meaning given in subparagraph (1);

U (a number) = has the meaning given in subparagraph (1);

NRCF (a number) = the negative residual contribution factor for all eligible units that do not have appropriate metering, for the relevant *trading interval* and the *region* or *regions* relevant to the *global market ancillary service requirement* or *local market ancillary service requirement* for the *regulating raise service* or *regulating lower service*, having regard to the principle in paragraph (f)(4);

TE (in MWh) = has the meaning given in subparagraph (b)(2); and

ATE (in MWh) = has the meaning given in subparagraph (b)(2).

Cost recovery for regulation services not used

- (d) In each *trading interval* in relation to:

- (1) each eligible unit which has appropriate metering, an *ancillary services transaction* occurs, which results in a *trading amount* for the relevant *Cost Recovery Market Participant* determined in accordance with the following formula:

$$TA = TSFCAS \times (1 - U) \times DCF$$

for each *trading interval* for each *global market ancillary service requirement* and each *local market ancillary service requirement*, where:

TA (in \$) = the *trading amount* payable by the *Cost Recovery Market Participant*;

TSFCAS (in \$) = has the meaning given in paragraph (c)(1);

U (a number) = has the meaning given in paragraph (c)(1); and

DCF (a number) = the default contribution factor for the eligible unit determined by *AEMO* under subparagraph (g)(4) for the relevant *trading interval* and the *region* or *regions* relevant to the *global market ancillary service requirement* or *local market ancillary service requirement* for the *regulating raise service* or *regulating lower service*.

- (2) each eligible unit for which the *trading amount* is not calculated in accordance with the formula in subparagraph (1), an *ancillary services transaction* occurs, which results in a *trading amount* for the relevant *Cost Recovery Market Participant* determined in accordance with the following formula:

$$TA = TSFCAS \times (1 - U) \times DRCF \times \frac{TE}{ATE}$$

for each *trading interval* for each *global market ancillary service requirement* and each *local market ancillary service requirement*, where:

TA (in \$) = has the meaning given in subparagraph (1);

TSFCAS (in \$) = has the meaning given in subparagraph (1);

U (a number) = has the meaning given in subparagraph (1);

DRCF (a number) = the default residual contribution factor for the eligible unit determined by *AEMO* under subparagraph (g)(4)(ii) for the relevant *trading interval* and the *region* or *regions* relevant to the *global market ancillary service requirement* or *local market ancillary service requirement* for the *regulating raise service* or *regulating lower service*;

TE (in MWh) = has the meaning given in subparagraph (b)(2); and

ATE (in MWh) = has the meaning given in subparagraph (b)(2).

Frequency contribution factors procedure

- (e) *AEMO* must determine, in accordance with the frequency contribution factors procedure, a contribution factor (which may be positive or negative) for each eligible unit for the purposes of clauses 3.15.6A(i) and 3.15.6AA(a) and (b).
- (f) *AEMO* must develop, *publish* on its website, and may amend from time to time, in accordance with the *Rules consultation procedures*, the frequency contribution factors procedure for determining contribution factors for use in paragraph (e), taking into account the following principles:
 - (1) a negative contribution factor for an eligible unit should reflect the extent to which the unit contributed to increasing the deviation in *frequency* of the *power system*;
 - (2) a positive contribution factor for an eligible unit should reflect the extent to which the unit contributed to reducing the deviation in *frequency* of the *power system*;
 - (3) a contribution factor is a number between -1 and 1;
 - (4) the residual contribution factor for all eligible units that do not have appropriate metering must be equal across and within all classes of *Cost Recovery Market Participant*;
 - (5) separate contribution factors must be determined with respect to the contribution to the need to raise or lower the *frequency* of the *power system*;
 - (6) a contribution factor for each eligible unit must be determined by *AEMO* for every *trading interval* unless in *AEMO*'s reasonable opinion it is impractical to do so, in which case *AEMO* must determine a default contribution factor;
 - (7) a contribution factor for each eligible unit applies for the *region* or *regions* relevant to the *global market ancillary service requirement* or *local market ancillary service requirement* for the *regulating raise service* or *regulating lower service*;
 - (8) a default contribution factor for an eligible unit must be determined based on historical data for that eligible unit unless in *AEMO*'s reasonable opinion it is impractical to do so; and
 - (9) a default contribution factor must only be used in paragraph (b) to determine the *trading amount* payable by a *Cost Recovery Market Participant*.
- (g) *AEMO* must include in the frequency contribution factors procedure:
 - (1) the criteria for determining whether an eligible unit has appropriate metering;
 - (2) a formula that *AEMO* will use in each *trading interval* to calculate the measure of the need to raise or lower the *frequency* of the *power system*, in order to determine a contribution factor under paragraph (e), which:
 - (i) must be based on the *frequency* of the *power system* in the relevant *region* or *regions*;

- (ii) must contain sufficient detail so that a *Cost Recovery Market Participant* can use it to estimate the need to raise or lower the *frequency* of the *power system* during each *trading interval*; and
 - (iii) may include parameters to be determined by *AEMO* from time to time to be applied to the different elements of the formula;
- (3) the methodology *AEMO* will use to determine a contribution factor to apply to an eligible unit which reflects the relevant *Cost Recovery Market Participant's* contribution to the deviation in *frequency* of the *power system*;
- (4) the methodology *AEMO* will use to determine default contribution factors to apply to an eligible unit:
 - (i) under paragraph (b) to determine the *trading amount* payable by a *Cost Recovery Market Participant* or paragraph (c), where it is impractical for *AEMO* to determine a contribution factor for that unit in a *trading interval* based on the data measured for that *trading interval* under subparagraph (f)(8);
 - (ii) for the allocation of costs of any *enabled regulating raise service* or *enabled regulating lower service* that was not used by *AEMO* in that *trading interval* under paragraph (d); and
- (5) the data *AEMO* will use to calculate the contribution factor for an eligible unit with appropriate metering, which must include the unit's *active power* output or consumption and a measure of *frequency*, and may include:
 - (i) the *frequency* measured at the *connection point* for the eligible unit; and
 - (ii) any other data *AEMO* considers relevant.
- (6) the methodology *AEMO* will use to determine:
 - (i) the requirement for corrective response under subparagraph (b)(1), which is a measure of the total volume in MW that contributed to reducing the deviation in *frequency* of the *power system*. This methodology may include parameters to be determined by *AEMO* from time to time to be applied in determining the requirement for corrective response; and
 - (ii) the usage under subparagraph (c)(1), which is the proportion of *enabled regulating raise service* or *regulating lower service* that contributed to reducing the deviation in *frequency* of the *power system*,
relevant to the *global market ancillary service requirement* or *local market ancillary service requirement* for the *regulating raise service* or *regulating lower service*; and
- (7) the methodology *AEMO* will use to determine a reference trajectory in each *trading interval* for each eligible unit which has appropriate metering, which must be informed by:

- (i) the *dispatch* target for a *scheduled generating unit*, *scheduled load*, *scheduled bidirectional unit*, *voluntarily scheduled resource* and *ancillary service unit* at the end of the previous *trading interval* and at the end of the relevant *trading interval*;
- (ii) the *dispatch* level for a *semi-scheduled generating unit* at the end of the previous *trading interval* and at the end of the relevant *trading interval*; and
- (iii) where practical, any information provided by a *Registered Participant* for a *non-scheduled generating unit* or *non-scheduled bidirectional unit* that relates to its expected trajectory over the *trading interval*,

and may be informed by any other factors *AEMO* considers relevant.

- (h) *AEMO* may make minor or administrative amendments to the frequency contribution factors procedure without complying with the *Rules consultation procedures*.

Publication requirements

- (i) *AEMO* must *publish* any data that will be used to determine default contribution factors under subparagraph (g)(4) at least 5 *days* before the *billing period* in which the contribution factor will apply.
- (j) *AEMO* must *publish* any parameters it determines under paragraph (g)(2) and (g)(6) at least 5 *business days* prior to applying those parameters.
- (k) *AEMO* must *publish*, as soon as practicable after the relevant *trading interval*:
 - (1) the contribution factors determined in accordance with paragraph (e);
 - (2) the data calculated from applying the formula referred to in paragraph (g)(2);
 - (3) the requirement for corrective response determined under subparagraph (g)(6)(i); and
 - (4) the usage determined under subparagraph (g)(6)(ii).
- (l) *AEMO* must *publish* the data used to determine the contribution factors for the *transactions* referred to in paragraphs (b), (c) and (d) including the measured data for each eligible unit which has appropriate metering, in accordance with the *timetable*.

3.15.7 Payment to Directed Participants

- (a) Subject to paragraphs (b) and (d1), *AEMO* must pay compensation to *Directed Participants* calculated in accordance with clauses 3.15.7, 3.15.7A and 3.15.7B, as the case may be, for any service which the *Directed Participant* was required to provide in order to comply with the *direction*.
- (a1) *AEMO* must compensate each *Directed Participant* for the provision of:

- (1) *energy* or *market ancillary services* pursuant to a *direction*, under this clause 3.15.7 and clause 3.15.7B, as the case may be; and
 - (2) services, other than *energy* or *market ancillary services*, pursuant to a *direction* (**other compensable services**), in accordance with the fair payment compensation for those services determined under clause 3.15.7A.
- (a2) For the purpose of paragraph (a1) a *Directed Participant* provides *energy* or *market ancillary services* if it was *directed* to provide one or more of the following services:
- (1) *energy*;
 - (2) any one of the *market ancillary services*;
 - (3) a service that is a direct substitute for *energy* or a *market ancillary service*; or
 - (4) a service that was provided by the *Directed Participant* where *energy* or *market ancillary services* are provided incidental to the provision of that service, including without limitation:
 - (i) *inertia*;
 - (ii) *voltage* control; and
 - (iii) system strength.
- (b) For the purpose of clause 3.15.8 and 3.15.10C the amount of compensation due to a *Directed Participant* pursuant to clause 3.15.7(a) must include interest on the sum of that amount less any payment made in accordance with clause 3.15.10C(a), computed at the average *bank bill rate* for the period beginning on the day on which payment was required to be made under clauses 3.15.16 and 3.15.17 in respect of the *final statement* for the *billing period* in which the *direction* was issued and ending on the day on which payment is required to be made pursuant to clause 3.15.10C.
- (c) Subject to clause 3.15.7(d) and clause 3.15.7B, the compensation payable to each *Directed Participant* for the provision of *energy* or *market ancillary services* pursuant to a *direction* is to be determined in accordance with the formula set out below:

$$\text{DCP} = \text{AMP} \times \text{DQ}$$

where:

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

AMP = the price below which are 90% of the *spot prices* or *ancillary service prices* (as the case may be) for the relevant service provided by *Scheduled Generators, Semi-Scheduled Generators, Scheduled Integrated Resource Providers, Integrated Resource Providers* in respect of *scheduled loads, Scheduled Network Service Providers, Demand Response Service Providers, Voluntarily*

Scheduled Resource Providers or *Market Customers* in the *region* to which the *direction* relates, for the 12 months immediately preceding the *trading day* in which the *direction* was issued; and

DQ = is either:

- (A) the difference between the total *adjusted gross energy* delivered or consumed by the *Directed Participant* and the total *adjusted gross energy* that would have been delivered or consumed by the *Directed Participant* had the *direction* not been issued; or
 - (B) the amount of the relevant *market ancillary service* which the *Directed Participant* has been *enabled* to provide in response to the *direction*.
- (d) If at the time *AEMO* issues a *direction*:
- (1) the *Directed Participant* had submitted a *dispatch bid* or *rebid* acknowledged by *AEMO* in accordance with clause 3.8.8 for *dispatch* of the service that is to be *dispatched* in accordance with the *direction*; and
 - (2) the *direction* was issued because *AEMO* was prevented from *dispatching* the *Directed Participant's plant* in accordance with that *dispatch bid* or *rebid* due to a failure of the *central dispatch* process, the *Directed Participant* is entitled to receive compensation for the provision of that service at a price equal to the price in that *dispatch bid* or *rebid* acknowledged by *AEMO* in accordance with clause 3.8.8, as the case may be.
- (d1) Where a *Directed Participant* is also a *Market Suspension Compensation Claimant* with respect to any *trading interval* in relation to which *AEMO* has issued a *direction*, such *Directed Participant*:
- (1) may be entitled to compensation calculated in accordance with clause 3.14.5A(d); and
 - (2) is not entitled to compensation calculated in accordance with paragraph (c).
- (e) *AEMO* must, in accordance with the *intervention settlement timetable*, advise each *Directed Participant* in writing of the amount the *Directed Participant* is entitled to receive pursuant to clause 3.15.7(c) or clause 3.15.7(d).

3.15.7A Payment to Directed Participants for services other than energy and market ancillary services

AEMO to determine if Directed Participant provided an other compensable service

- (a) If *AEMO* has issued a *direction*, *AEMO* must, in its reasonable opinion, determine whether the *Directed Participant* that was issued the *direction* was required to provide an *other compensable service* in order to comply with that *direction*.

- (b) *AEMO* must within 10 *business days* of issuing the *direction* referred to in paragraph (a), notify the relevant *Directed Participant* of *AEMO's* determination under paragraph (a), and such notice must include:
 - (1) the date and time of the relevant *direction*;
 - (2) the *directed resource* the subject of the relevant *direction*;
 - (3) the circumstances of the relevant *direction*;
 - (4) *AEMO's* determination as to whether an *other compensable service* was provided in order to comply with the *direction* and, if applicable, a description of the *other compensable service* provided; and
 - (5) *AEMO's* reasons for its determination.
- (c) If *AEMO* determines pursuant to paragraph (a) that the *Directed Participant* was not required to provide an *other compensable service* in order to comply with the relevant *direction*, the *Directed Participant* may, within 10 *business days* of receipt of the notice referred to in paragraph (b), make a written submission to *AEMO* setting out its reasons for why it considers that an *other compensable service* was required to be provided by the *Directed Participant* in complying with that *direction*.
- (d) *AEMO* must take into consideration any submissions referred to in paragraph (c), and must within 10 *business days* of receipt of such submissions, notify the *Directed Participant* of its final determination as to whether an *other compensable service* was required to be provided by the *Directed Participant* in complying with the relevant *direction*, including *AEMO's* reasons for its determination.

Directed Participant not required to provide an other compensable service not entitled to compensation

- (e) A *Directed Participant* that was not required to provide an *other compensable service* in order to comply with a *direction*:
 - (1) is not entitled to compensation under this clause 3.15.7A; and
 - (2) is not entitled to claim additional compensation under clause 3.15.7B.

Directed Participant required to provide an other compensable service can claim fair payment compensation

- (f) If *AEMO* determines pursuant to paragraph (a) that the *Directed Participant* was required to provide an *other compensable service* in order to comply with the relevant *direction*, the *Directed Participant* may, within 15 *business days* of receipt of the notice referred to in paragraph (b), make a written submission to *AEMO* claiming compensation under this clause 3.15.7A at the fair payment compensation of the *other compensable services* provided pursuant to that *direction*.
- (g) For the purpose of determining the fair payment compensation under this clause 3.15.7A, the following must be taken into account:
 - (1) relevant contractual arrangements which specify a price for the relevant service;

- (2) the loss of revenue incurred by the *Directed Participant* in respect of its *directed resource* as a result of the provision of the *other compensable service* under *direction*;
- (3) the net direct costs incurred by the *Directed Participant* in respect of that *directed resource* as a result of the provision of the *other compensable service* under *direction* including without limitation:
 - (i) fuel costs in connection with the relevant *directed resource*;
 - (ii) incremental maintenance costs in connection with the relevant *directed resource*;
 - (iii) incremental manning costs in connection with the relevant *directed resource*;
 - (iv) acceleration costs of maintenance work in connection with the relevant *directed resource*, where such acceleration costs are incurred to enable the *generating unit, load* or *scheduled network services* to comply with the *direction*;
 - (v) delay costs for maintenance work in connection with the relevant *directed resource*, where such delay costs are incurred to enable the *generating unit, load* or *scheduled network services* to comply with the *direction*; and
 - (vi) other costs incurred in connection with the relevant *directed resource*, where such costs are incurred to enable the *directed resource* to comply with the *direction*.

AEMO must refer claims to an independent expert in certain circumstances

- (h) *AEMO* must, in accordance with the *intervention settlement timetable* refer a claim by a *Directed Participant* pursuant to paragraph (f) to an independent expert to determine such claim in accordance with clause 3.12.3 if:
 - (1) the claim is equal to or greater than \$20,000; or
 - (2) *AEMO* considers that the claim is unreasonable; or
 - (3) *AEMO* considers that the assessment of the claim involves issues of complexity or difficulty.
- (i) If *AEMO* considers that either of paragraphs (h)(2) or (h)(3) apply, *AEMO* must, in accordance with the *intervention settlement timetable* advise the *Directed Participant* in writing of its decision, setting out its reasons.
- (j) *AEMO* must include as part of the terms of appointment of an independent expert all the requirements set out in clause 3.12.3(c), and the additional following requirements:
 - (1) that the independent expert must, in determining the fair payment compensation of the relevant *other compensable service* for the purposes of this clause 3.15.7A, only take into account:
 - (i) the factors referred to in paragraph (g); and
 - (ii) the following principles:

- (A) the disinclination of *Directed Participants* to provide the *other compensable service* the subject of the *direction* must be disregarded; and
 - (B) the urgency of the need for the *other compensable service* the subject of the *direction* must be disregarded;
- (2) that the independent expert's draft report must set out a description of the *other compensable services* provided in response to the *direction*; and
 - (3) that the independent expert's final report must set out the description of the *other compensable services* provided in response to the *direction*.

AEMO may determine compensation itself in some circumstances

- (k) If none of the factors set out in paragraph (h) apply, then *AEMO* may, after taking into account any submissions received in accordance with paragraph (f), determine in its sole discretion the amount of compensation payable to a *Directed Participant* under this clause 3.15.7A in relation to that *Directed Participant's* claim pursuant to paragraph (f).
- (l) Subject to paragraph (h), if a *Directed Participant* entitled to make a written submission pursuant to paragraph (f) has not provided such a submission to *AEMO* within 15 *business days* of receipt of the notice referred to in paragraph (b), then *AEMO* may at its sole discretion determine the amount of compensation payable to that *Directed Participant* under this clause 3.15.7A at the fair payment compensation of the *other compensable services* provided pursuant to the relevant *direction*.
- (m) If *AEMO* decides in accordance with either of paragraphs (k) or (l) to determine compensation payable to a *Directed Participant* under this clause 3.15.7A in relation to that *Directed Participant's* claim pursuant to paragraph (f) *AEMO* must in accordance with the *intervention settlement timetable*:
 - (1) *publish* and deliver in writing to the relevant *Directed Participant* a draft determination detailing *AEMO's* calculation of the amount of compensation receivable by that party pursuant to clause 3.15.7A, and request submissions from the *Directed Participant* on that draft determination;
 - (2) take into consideration any written submissions made by the relevant *Directed Participant* in relation to the draft determination, if *AEMO* receives those submissions within 15 *business days* of delivering the draft assessment to that *Directed Participant*; and
 - (3) prepare, *publish* and deliver in writing to the relevant *Directed Participant* its final determination of the amount of compensation receivable by that *Directed Participant* pursuant to this clause 3.15.7A.
- (n) The final determination by *AEMO* in accordance with paragraph (m)(3) is final and binding.

3.15.9 Reserve settlements

- (a) *AEMO's* costs incurred in contracting for the provision of *reserves* are to be met by fees imposed on *Cost Recovery Market Participants* in accordance with this clause 3.15.9.
- (a1) If clause 3.15.9A applies in respect of a *region*, fees imposed under this clause 3.15.9 may be subject to subsequent adjustment under clause 3.15.9A.
- (b) *AEMO* must, in accordance with the *intervention settlement timetable*, calculate:
 - (1) the aggregate of the amounts payable by *AEMO* under *reserve contracts* in respect of the relevant *billing period*;
 - (2) any amounts determined as payable by *AEMO*:
 - (i) by the independent expert under clause 3.12.3 in respect of an *AEMO intervention event* that is an exercise of the *RERT* during the relevant *billing period*; or
 - (ii) as a result of a *scheduled generating unit, scheduled bidirectional unit, scheduled network service, wholesale demand response unit, voluntarily scheduled resource* or *scheduled load* under a *scheduled reserve contract* being *dispatched* or *generating units, bidirectional units* or other *plant* under an *unscheduled reserve contract* being *activated*; or
 - (iii) to *Affected Participants, Market Customers* and *Ancillary Service Providers* pursuant to clause 3.12.2 in respect of an *AEMO intervention event* that is an exercise of the *RERT* during the relevant *billing period*,in respect of the relevant *billing period*;
 - (3) the aggregate of the amounts receivable by *AEMO* under the *Rules* in respect of *reserve contracts* during the relevant *billing period*; and
 - (4) any amounts determined as receivable by *AEMO*:
 - (i) by the independent expert under clause 3.12.3 in respect of an *AEMO intervention event* that is an exercise of the *RERT* during the relevant *billing period*; or
 - (ii) from *Affected Participants* and *Ancillary Service Providers* pursuant to clause 3.12.2 in respect of an *AEMO intervention event* that is an exercise of the *RERT* during the relevant *billing period*,in respect of the relevant *billing period*.
- (c) Separate amounts must be calculated under paragraph (b):
 - (1) for *reserve contracts* entered into by *AEMO* specifically in respect of the *Market Participant's region* in accordance with paragraph (d); and

- (2) for *reserve contracts* other than those entered into for and allocated to a specific *region* or *regions*.

(d) Where either:

- (1) without the intervention in the *market* of *AEMO* a *region* would otherwise, in *AEMO's* reasonable opinion, fail to meet the minimum *power system security standards* or *the reliability standard*; or
- (2) a *region* requires a level of *power system reliability* or *reserves* which, in *AEMO's* reasonable opinion, exceeds the level required to meet the *reliability standard*,

then *AEMO* must:

- (3) recover its net liabilities, or distribute its net profits, under the terms of *reserve contracts* entered into to meet these requirements; and
- (4) recover any amounts determined as payable by *AEMO* to *Affected Participants*, *Affected Load Participants* and *Ancillary Service Providers* (less any amounts determined as receivable by *AEMO* from *Affected Participants* and *Ancillary Service Providers*) pursuant to clause 3.12.2 in respect of an *AEMO intervention event* that is an exercise of the *RERT*; and
- (5) recover any amounts determined as payable by *AEMO* by the independent expert under clause 3.12.3 in respect of an *AEMO intervention event* that is an exercise of the *RERT*,

from or to the *Cost Recovery Market Participants* in that *region* in accordance with paragraph (e).

(e) In respect of:

- (1) *reserve contracts* entered into by *AEMO*; and
- (2) any amounts determined as payable by *AEMO* to *Affected Participants*, *Affected Load Participants* and *Ancillary Service Providers* (less any amounts determined as receivable by *AEMO* from *Affected Participants* and *Ancillary Service Providers*) pursuant to clause 3.12.2 in respect of an *AEMO intervention event* that is an exercise of the *RERT*; and
- (3) any amounts determined as payable by *AEMO* by the independent expert under clause 3.12.3 in respect of an *AEMO intervention event* that is an exercise of the *RERT*,

AEMO must calculate in relation to each *Cost Recovery Market Participant* for each *region* in respect of each *billing period* a sum determined by applying the following formula:

$$CRP = \left[\frac{(E_{UC} \times UC)}{\sum E_{UC}} \right] + \left[\frac{(E_{OC} \times OC)}{\sum E_{OC}} \right]$$

where:

CRP is the amount payable by a *Cost Recovery Market Participant* for a *region* in respect of a *billing period*;

UC is:

- (1) the total usage charges (or equivalent charges) paid by *AEMO* under *reserve contracts*, as allocated in accordance with paragraph (e1); and
- (2) the total amount determined as payable by *AEMO* to *Affected Participants*, *Affected Load Participants* and *Ancillary Service Providers* (less any amounts determined as receivable by *AEMO* from *Affected Participants* and *Ancillary Service Providers*) pursuant to clause 3.12.2 in respect of an *AEMO intervention event* that is an exercise of the *RERT*; and
- (3) the total amount determined as payable by *AEMO* by the independent expert under clause 3.12.3 in respect of an *AEMO intervention event* that is an exercise of the *RERT*.

E_{UC} is the sum of all that *Cost Recovery Market Participant's adjusted consumed energy* amounts in the relevant *region* (the "**relevant region**") in each *trading interval* during which *reserves* were *dispatched* or *activated* under a *reserve contract* in the *billing period*, excluding *adjusted consumed energy* of any *scheduled loads*, ~~or~~ *scheduled bidirectional units* or voluntarily scheduled resources (but excluding any periods in which that voluntarily scheduled resource has been recorded as an inactive voluntarily scheduled resource or as a hibernated voluntarily scheduled resource) in that *region* in respect of which the *Cost Recovery Market Participant* submitted a *dispatch bid* for any such *trading interval*;

$\sum E_{UC}$ is the sum of all amounts determined as "*E_{UC}*" in accordance with this paragraph (e) in respect of that *region* for the relevant *billing period*;

O_C is the total amount paid by *AEMO* under *reserve contracts* in the relevant *region* in the *billing period*, other than:

- (1) amounts determined as "*UC*" in accordance with this paragraph (e) in respect of that *billing period*; and
- (2) operational and administrative costs described in paragraph (g);

E_{OC} is the sum of all that *Cost Recovery Market Participant's adjusted consumed energy* amounts in the relevant *region* in the *billing period*, excluding *adjusted consumed energy* of any *scheduled loads*, ~~or~~ *scheduled bidirectional units* or voluntarily scheduled resources (but excluding any periods in which that voluntarily scheduled resource has been recorded as an inactive voluntarily scheduled resource or as a hibernated voluntarily scheduled resource) in that *region* in respect of which the *Cost Recovery Market Participant* submitted a *dispatch bid* for any *trading interval* during that *billing period*; and

$\sum E_{OC}$ is the sum of all amounts determined as "*E_{OC}*" in accordance with this paragraph (e) in respect of that *region* for the relevant *billing period*.

- (e1) For the purposes of determining amount "*UC*" in paragraph (e), *AEMO* must reasonably allocate usage charges (or equivalent charges) under *reserve contracts* to the *trading intervals* during which *reserves* were *dispatched* or *activated* in the relevant *region* in the *billing period*.

- (f) A *Cost Recovery Market Participant* is liable to pay *AEMO* an amount equal to the sum calculated under paragraph (e) in respect of that *Cost Recovery Market Participant*.

Note

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

- (g) Operational and administrative costs incurred by *AEMO* in arranging for the provision of *reserves*, other than its liabilities under the terms of the *reserve contracts* into which it has entered, are to be recovered by *AEMO* from all *Market Participants* as part of the fees imposed in accordance with rule 2.11.
- (h) For the purposes of clause 3.15.19, a re-determination by a panel established under clause 3.12.2 is to be taken to be an agreement between *AEMO* and each of the *Market Participants*.

3.16 Participant compensation fund

3.16.1 Establishment of Participant compensation fund

- (a) *AEMO* must continue to maintain, in the books of the corporation, a fund called the *Participant compensation fund* for the purpose of paying compensation to *Scheduled Generators*, *Semi-Scheduled Generators*, *Scheduled Integrated Resource Providers*, *Voluntarily Scheduled ServiceResource Providers* and *Scheduled Network Service Providers* as determined by the *dispute resolution panel* for *scheduling errors* under this Chapter 3.
- (b) *AEMO* must pay to the *Participant compensation fund* that component of *Participant fees* under rule 2.11 attributable to the *Participant compensation fund*.
- (c) The funding requirement for the *Participant compensation fund* for each *financial year* is the lesser of:
- (1) \$1,000,000; and
 - (2) \$5,000,000 minus the amount which *AEMO* reasonably estimates will be the balance of the *Participant compensation fund* at the end of the relevant *financial year*.
- (d) The *Participant compensation fund* is to be maintained by *AEMO* and is the property of *AEMO*.
- (e) Any interest paid on money held in the *Participant compensation fund* will accrue to and form part of the *Participant compensation fund*.
- (f) *AEMO* must pay from the *Participant compensation fund* all income tax on interest earned by the *Participant compensation fund* and must pay from the *Participant compensation fund* all bank account debit tax, financial institutions duty and bank fees in relation to the *Participant compensation fund*.
- (g) A person is not entitled to a refund of any contributions made to the *Participant compensation fund* upon ceasing to be a *Scheduled Generator*,

Semi-Scheduled Generator, Scheduled Integrated Resource Provider, ~~Voluntarily Scheduled Service~~Resource Providers or Scheduled Network Service Provider.

(h) [Deleted]

3.16.2 Dispute resolution panel to determine compensation

- (a) Where a *scheduling error* occurs, a *Market Participant* may apply to the *dispute resolution panel* for a determination as to compensation under this clause 3.16.2.
- (b) Where a *scheduling error* occurs, the *dispute resolution panel* may determine that compensation is payable to *Market Participants* and the amount of any such compensation payable from the *Participant compensation fund*.
- (c) A determination by the *dispute resolution panel* as to compensation must be consistent with this clause 3.16.2.
- (d) A *Scheduled Generator, Semi-Scheduled Generator, ~~or~~ Scheduled Integrated Resource Provider or Voluntarily Scheduled Service*Resource Provider who receives an instruction in respect of a *scheduled generating unit, semi-scheduled generating unit ~~or~~, scheduled bidirectional unit or voluntarily scheduled resource* (as the case may be) to operate at a *loading level* different to the *loading level* at which it would have been instructed to operate had the *scheduling error* not occurred, will be entitled to receive in compensation an amount determined by the *dispute resolution panel*.
- (e) A *Scheduled Network Service Provider* who receives an instruction in respect of its *scheduled network services* to transfer less *power* on the *scheduled network service* than it would have been instructed to transfer had the *scheduling error* not occurred, will be entitled to receive in compensation an amount determined by the *dispute resolution panel*.
- (f) A *Scheduled Generator, Semi-Scheduled Generator ~~or~~, Scheduled Integrated Resource Provider or Voluntarily Scheduled Service*Rssource Provider who receives a *dispatch instruction* in respect of a *generating unit ~~or~~, bidirectional unit or voluntarily scheduled resource* to operate at a level consistent with a *dispatch bid price* (with reference to the relevant *regional reference node*) which is higher than the *spot price*, due to the operation of clause 3.9.2B, is entitled to receive in compensation an amount determined by the *dispute resolution panel*.
- (g) A *Scheduled Network Service Provider* who receives an instruction in respect of its *scheduled network services* to transfer *power* on the *scheduled network service* consistent with a *dispatch bid price* but receives less net revenue than would be expected under clause 3.8.6A(f) due to adjustment of the *spot price* for a trading interval under clause 3.9.2B, is entitled to receive in compensation an amount determined by the *dispute resolution panel*.
- (h) In determining the level of compensation to which *Market Participants* are entitled in relation to a *scheduling error*, the *dispute resolution panel* must:
 - (1) where the entitlement to compensation arises under clause 3.16.2(f), determine compensation on the basis of the actual *loading level* and not the *dispatch instruction* applicable to the relevant *scheduled generating*

unit, semi-scheduled generating unit ~~or~~, *scheduled bidirectional unit* or voluntarily scheduled resource for that *trading interval*;

- (2) where the entitlement to compensation arises under clause 3.16.2(g), determine compensation on the basis of the actual *loading level* and not the *dispatch instruction* applicable to the relevant *scheduled network service* for that *trading interval*;
 - (3) use the *spot price* as determined under rule 3.9, including any *spot prices* that have been adjusted in accordance with clause 3.9.2B;
 - (4) take into account the current balance of the *Participant compensation fund* and the potential for further liabilities to arise during the year;
 - (5) recognise that the aggregate liability in any year in respect of *scheduling errors* cannot exceed the balance of the *Participant compensation fund* that would have been available at the end of that year if no compensation payments for *scheduling errors* had been made during that year.
- (i) The manner and timing of payments from the *Participant compensation fund* are to be determined by the *dispute resolution panel*.
 - (j) To the maximum extent permitted by law, *AEMO* is not liable in respect of a *scheduling error* except out of the *Participant compensation fund* as contemplated in this clause 3.16.2.

3.20 Reliability and Emergency Reserve Trader

3.20.3 Reserve contracts

- (a) Subject to paragraph (f), and in order to ensure that the reliability of *supply* in a *region* meets the *reliability standard* for the *region*, *AEMO* may enter into one or more contracts with any person in relation to the capacity of:
 - (1) *scheduled generating units, scheduled bidirectional units, wholesale demand response units, voluntarily scheduled resources, scheduled network services* or *scheduled loads* (being *scheduled reserve contracts*); and
 - (2) *unscheduled reserves* (being *unscheduled reserve contracts*).
- (b) Subject to paragraph (f), *AEMO* may:
 - (1) enter into *reserve contracts*; or
 - (2) vary existing *reserve contracts*,in addition to the contracts already entered into by *AEMO* under this rule 3.20.
- (c) If, at any time *AEMO* determines that it is necessary to commence contract negotiations for the provision of additional *reserves* under this rule 3.20, *AEMO* must *publish* a notice of its intention to do so.

Consultation with jurisdictions

- (d) *AEMO* must consult with persons nominated by the relevant *participating jurisdictions* in relation to any determination to enter into contracts under this rule 3.20.

- (e) In entering into *reserve contracts* under this rule 3.20, *AEMO* must agree with the relevant nominated persons referred to in paragraph (d) cost-sharing arrangements between the *regions* for the purpose of clause 3.15.9.

Procurement trigger and lead time

- (f) *AEMO* must not enter into a *reserve contract* for a *region* (or vary a *reserve contract* for a *region* that was entered into following a previous declaration under clause 4.8.4 for that *region*):
- (1) unless it has made a declaration under clause 4.8.4 for that *region*; and
 - (2) more than 12 months prior to the:
 - (i) commencement of any time period specified in the declaration in accordance with clause 4.8.5(a1)(2); or
 - (ii) where no such time period is specified, the date *AEMO* reasonably expects that the *reserves* under that contract may be required to address the *low reserve* or *lack of reserve* condition, having regard to the *reliability standard implementation guidelines*.

For the avoidance of doubt, *AEMO* may negotiate with potential tenderers in relation to *reserve contracts* at any time.

Offering scheduled reserves into the market

- (g) When contracting for the provision of *scheduled reserves* under *scheduled reserve contracts*, *AEMO* must not enter contracts in relation to capacity of *scheduled generating units*, *scheduled bidirectional units*, *wholesale demand response units*, *voluntarily scheduled resources*, *scheduled network services* or *scheduled loads* for which *dispatch bids* have been submitted or are considered by *AEMO* to be likely to be submitted or be otherwise available for *dispatch* at any time during:
- (1) the period from the date of execution of the *scheduled reserve contract* until the end of its term; and
 - (2) the 12 month period immediately preceding the date of execution of the *scheduled reserve contract*, except where that capacity was *dispatched* under a *reserve contract*.
- (h) A person must not enter into a *scheduled reserve contract* in relation to capacity for which *dispatch bids* were submitted, or that was otherwise available for *dispatch* at any time during the 12 month period immediately preceding the date of execution of the *scheduled reserve contract*, except where that capacity was *dispatched* under a *scheduled reserve contract*.

Note

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

Offering unscheduled reserves during specified trading intervals

- (i) A person must not enter into an *unscheduled reserve contract* if the person is party to another contract or arrangement under which it is required to offer

the *unscheduled reserves* the subject of the *unscheduled reserve contract* in the market for the *trading intervals* to which the contract with *AEMO* relates.

Note

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

Terms and conditions of a contract

- (j) If *AEMO* seeks to enter into a *reserve contract* with a *Registered Participant* then the *Registered Participant* must negotiate with *AEMO* in good faith as to the terms and conditions of the contract.
- (k) *AEMO* may only enter into a *scheduled reserve contract* if the contract contains:
 - (1) a provision that the other party to the contract has not and will not otherwise offer the *scheduled reserve* the subject of the contract in the market at any time during the period from the date of execution of that contract until the end of its term; and
 - (2) a nominal MW value reflecting *AEMO's* view of the likely available capacity of that *reserve contract*.
- (l) *AEMO* may only enter into an *unscheduled reserve contract* if the contract contains:
 - (1) a provision that the other party to the contract has not and will not otherwise offer the *unscheduled reserve* the subject of the contract in the market for the *trading intervals* to which the contract with *AEMO* relates; and
 - (2) a nominal MW value reflecting *AEMO's* view of the likely available capacity of that *reserve contract*.
- (m) *AEMO* must use reasonable endeavours to ensure that:
 - (1) subject to subparagraph (f)(2), the term of a *reserve contract* is no longer than *AEMO* considers is reasonably necessary to address the relevant *low reserve* or *lack of reserve* condition; and
 - (2) the amount of *reserve* procured under a *reserve contract* is no more than *AEMO* considers is reasonably necessary to address the relevant *low reserve* or *lack of reserve* condition.having regard to the *RERT principles*.

CHAPTER 4

4. Power System Security

4.9 Power System Security Related Market Operations

4.9.2 Instructions to Scheduled Generators, Semi-Scheduled Generators, ~~and~~ Scheduled Integrated Resource Providers and Voluntarily Scheduled Resource Providers

- (a) To implement *central dispatch* or, where *AEMO* has the power to direct or to instruct a *Scheduled Generator*, *Semi-Scheduled Generator* ~~or~~, *Scheduled Integrated Resource Provider* or Voluntarily Scheduled Resource Provider either under Chapter 3 or this Chapter, then for the purpose of giving effect to that direction or instruction, *AEMO* may at any time give an instruction to the *Generator* ~~or~~, *Integrated Resource Provider* or Voluntarily Scheduled Resource Provider in relation to any of its *generating units* ~~or~~, *bidirectional units* or voluntarily scheduled resources (a *dispatch instruction*), in accordance with clause 4.9.5(b), nominating:
- (1) whether the facilities for *generation remote control* by *AEMO*, if available, must be in service; and
 - (2) in the case of a:
 - (i) *scheduled generating unit* ~~or~~, *scheduled bidirectional unit* or voluntarily scheduled resources, the level or schedule of power; and
 - (ii) *semi-scheduled generating unit*, the *dispatch level*, applicable over the specified period.
- (b) Subject to paragraph (c), *AEMO* may at any time give an instruction to a *Generator* or *Integrated Resource Provider* in relation to any of its *generating units* with a *nameplate rating* of 30MW or more, or its *generating systems* of combined *nameplate rating* of 30 MW or more, nominating that:
- (1) the *generating unit* or *generating system* transformer is to be set to a nominated tap position (if it has on-load tap changing capability);
 - (2) the *generating unit's* or *generating system's voltage control system* set-point is to be set to give a nominated *voltage*; or
 - (3) the *generating unit* or *generating system* is to be operated to supply or absorb a nominated level of *reactive power* at its *connection point*.
- (b1) Subject to paragraph (c), *AEMO* may at any time give an instruction to an *Integrated Resource Provider* in relation to any of its *bidirectional units* with a *nameplate rating* of 5 MW or more, or its *integrated resource systems* of combined *nameplate rating* of 5 MW or more, nominating that:
- (1) the *bidirectional unit* or *integrated resource system* transformer is to be set to a nominated tap position (if it has on-load tap changing capability);
 - (2) the *bidirectional unit's* or *integrated resource system's voltage control system* set-point is to be set to give a nominated *voltage*; or

- (3) the *bidirectional unit* or *integrated resource system* is to be operated to supply or absorb a nominated level of *reactive power* at its *connection point*.
- (c) Unless otherwise provided under an *ancillary services agreement*, a *network support agreement* or a *connection agreement*, AEMO must not give an instruction under paragraph (b) or (b1) that requires a *generating unit* or *generating system* or *bidirectional unit* or *integrated resource system* (as applicable) to supply or absorb *reactive power* at a level outside the *plant's* relevant *performance standard*.
- (d) A *Scheduled Generator*, *Semi-Scheduled Generator* ~~or~~, *Scheduled Integrated Resource Provider* or *Voluntarily Scheduled Resource Provider* must, with respect to its *generating units* ~~or~~, *bidirectional units* or *voluntarily scheduled resources* that have an availability offer of greater than 0 MW (whether *synchronised* or not), ensure that appropriate personnel are available at all times to receive and immediately act upon *dispatch instructions* issued by AEMO to the relevant *Generator* ~~or~~ *Integrated Resource Provider* or *Voluntarily Scheduled Resource Provider*.

Note

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

4.9.4 Dispatch related limitations on Scheduled Generators, Semi-Scheduled Generators and Scheduled Integrated Resource Providers

A *Scheduled Generator*, *Semi-Scheduled Generator* ~~or~~, *Scheduled Integrated Resource Provider* or *Voluntarily Scheduled Resource Provider* (as the case may be) must not, unless in ~~that person's~~ the *Generator's* or *Integrated Resource Provider's* reasonable opinion, public safety would otherwise be threatened or there would be a material risk of damaging equipment or the environment:

- (a) send out any *energy* from a *generating unit* ~~or~~, *bidirectional unit* or *voluntarily scheduled resource*, except:
- (1) in accordance with a *dispatch instruction*;
 - (2) in response to remote control signals given by AEMO or its agent;
 - (3) in connection with a test conducted in accordance with the requirements of this Chapter or Chapter 5; or
 - (3A) as a consequence of its operation in *frequency response mode* in order to adjust *power system frequency* in response to *power system* conditions; or
 - (4) in the case of a *scheduled generating unit*, in accordance with the *self-commitment* process specified in clause 4.9.6 up to the *self-dispatch level*;

Note

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

- (b) adjust the *transformer tap position* or *excitation control system voltage* set-point of a *scheduled generating unit*, *scheduled bidirectional unit* ~~or~~, *semi-scheduled generating unit* or voluntarily scheduled resource (if applicable) except:
- (1) in accordance with a *dispatch instruction*;
 - (2) in response to remote control signals given by *AEMO* or its agent;
 - (3) if, in the *Generator's* ~~or~~, *Integrated Resource Provider's* or Voluntarily Scheduled Resource Provider's reasonable opinion, the adjustment is urgently required to prevent material damage to that person's ~~the Generator's or Integrated Resource Provider's~~ *plant* or associated equipment, or in the interests of safety; or
 - (4) in connection with a test conducted in accordance with the requirements of rule 5.7;

Note

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

- (c) *energise* a *connection point* in relation to a *generating unit* ~~or~~, *bidirectional unit* or voluntarily scheduled resource without obtaining approval from *AEMO* immediately prior to *energisation*;

Note

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

- (d) *synchronise* or *de-synchronise* a *scheduled generating unit* with a *nameplate rating* of 30MW or more, without prior approval from *AEMO* or other than in response to a *dispatch instruction* except:
- (1) *de-synchronisation* as a consequence of the operation of automatic protection equipment; or
 - (2) where such action is urgently required to prevent material damage to *plant* or equipment or in the interests of safety;

Note

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

- (e) change the *frequency response mode* of a *scheduled generating unit*, *semi-scheduled generating unit* or *scheduled bidirectional unit* without the prior approval of *AEMO*; or

Note

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

- (f) remove from service or interfere with the operation of any *power system* stabilising equipment installed on that *generating unit* or *bidirectional unit*.

Note

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

4.11 Power System Security Support

4.11.1 Remote control and monitoring devices

- (a) All remote control, operational metering and monitoring devices and local circuits as described in schedules 5.2, 5.3 and 5.3a, must be installed and maintained in accordance with the standards and protocols determined and advised by *AEMO* (for use in the *control centres*) for each:
- (1) *scheduled generating unit, scheduled bidirectional unit_ and semi-scheduled generating unit connected to the transmission network or distribution network; and*
 - (2) *substation connected to the network.*

Note

This paragraph is classified as a tier 3 civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (b) The provider of any *ancillary services, system strength services or inertia network services* must arrange the installation and maintenance of all *remote control equipment and remote monitoring equipment* in accordance with the standards and protocols determined and advised by *AEMO* for use in the relevant *control centre*.

Note

This paragraph is classified as a tier 3 civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c) The control and monitoring devices must include provision for indication of *active power and reactive power* output, provision for signalling the status and any associated alarm condition relevant to achieving adequate control of the *transmission network*, and provision for indication of *generating plant* active and reactive output.

Note

This paragraph is classified as a tier 3 civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (c1) A *Demand Response Service Provider* must in respect of its *wholesale demand response units* arrange the installation and maintenance of all *remote control equipment and remote monitoring equipment* in accordance with the standards and protocols determined and advised by *AEMO* for use in the relevant *control centre*.
- (d) Where reasonably necessary to allow *AEMO* to discharge its *market and power system security* functions *AEMO* may, by notice in writing, require a *Network Service Provider, a Generator, an Integrated Resource Provider,*

Voluntarily Scheduled Resource Provider -or a *Market Network Service Provider* to:

- (1) install *remote monitoring equipment* which, in *AEMO's* reasonable opinion, is adequate to enable *AEMO* to remotely monitor the performance of a *transmission system* or *distribution system, generating unit*~~-or~~, *bidirectional unit* or *voluntarily scheduled resource* (including its *dynamic performance*) or a *market network service facility* as appropriate; and
 - (2) upgrade, modify or replace any *remote monitoring equipment* already installed in a *facility* provided that the existing *remote monitoring equipment* is, in the reasonable opinion of *AEMO*, no longer fit for the intended purpose.
- (e) A *Network Service Provider, Generator, Integrated Resource Provider, Voluntarily Scheduled Resource Provider* or *Market Network Service Provider* who receives a notice in accordance with clause 4.11.1(d), must comply with the notice within 120 *business days* or such further period that *AEMO* requires.

Note

This paragraph is classified as a tier 3 civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

- (f) [Deleted]
- (g) A *Generator, Integrated Resource Provider, Voluntarily Scheduled Service Provider* or *Market Network Service Provider* wishing to receive *dispatch instructions* electronically from *AEMO's AGC* under clause 3.8.21(d) must comply with *AEMO's* reasonable requirements in respect of how the remote control signals are issued by the *AGC* and transmitted to the *facility*.

Note

This paragraph is classified as a tier 3 civil penalty provision under the National Electricity (South Australia) Regulations. (See clause 6(1) and Schedule 1 of the National Electricity (South Australia) Regulations.)

CHAPTER 4A



4A. Retailer Reliability Obligation

Part E Qualifying Contracts and Net Contract Position

Division 1 Key concepts

4A.E.1 Qualifying contracts

- (a) The *AER*, in the Contracts and Firmness Guidelines:
- (1) may include guidance for liable entities to determine whether a contract or arrangement is a qualifying contract;
 - (2) must not prescribe other types of contracts or arrangements that are taken to be qualifying contracts under section 14O(1)(b) of the *NEL*; and
 - (3) may specify the types of contracts or other arrangements that are taken to be excluded contracts (and therefore not qualifying contracts) under section 14O(2) of the *NEL*.

Note

Section 14O(1) of the *NEL* defines a qualifying contract of a liable entity as a contract or other arrangement to which the liable entity is a party –

- (a) that -
 - (i) is directly related to the purchase or sale, or price for the purchase or sale, of electricity from the *wholesale exchange* during a stated period; and
 - (ii) the liable entity entered into to manage its exposure in relation to the volatility of the spot price; or
- (b) of another type prescribed by the *Rules* to be a qualifying contract.

Section 14O(2) of the *NEL* states a qualifying contract does not include a contract or arrangement mentioned in subsection (1)(a) that is prescribed by the *Rules* to be an excluded contract for the reliability obligations.

- (b) In providing guidance under subparagraph (a)(1) in the Contracts and Firmness Guidelines, the *AER* must have regard to the principle that the contract or other arrangement should support (directly or indirectly) investment in plant or other arrangements that:
 - (1) can supply *energy* that may be *dispatched*; or
 - (2) can reduce demand for *energy* that may be activated,

as required to meet *energy* requirements in the relevant *region*.
- (c) A demand side participation contract or other arrangement, under which a person provides:
 - (1) demand response (including *wholesale demand response*) by curtailing *non-scheduled load* or the provision of *unscheduled generation* in certain specified circumstances; or
 - (2); the use of a *qualifying resource* as a *voluntarily scheduled resource*.

will only be a qualifying contract if it meets the requirements of section 14O(1)(a) of the *NEL* and is registered in *AEMO's* Demand Side Participation Information Portal.

- (d) A MLO product is taken to be a qualifying contract and have a firmness factor of one for the buyer of that product.
- (e) Subject to paragraph (c), a liable entity's own *generation* or *load curtailment* ~~or the provision by a liable entity of wholesale demand response, the provision by a liable entity of wholesale demand response, or a liable entity's use of its qualifying resource as a voluntarily scheduled resource~~ may be an arrangement that is a qualifying contract in accordance with the Contracts and Firmness Guidelines.

Part F Compliance with the Retailer Reliability Obligation

Division 2 Key concepts

4A.F.3 Share of one-in-two year peak demand forecast

- (a) For the purposes of section 14R(2) of the *NEL*, a liable entity's share of the one-in-two year peak demand forecast for a compliance TI (**liable share**) is calculated as follows:

$$LS = \left(\frac{LL}{HAPD} \right) \times OITPDF$$

where:

- LS* = the liable entity's liable share (in MW);
- LL* = the liable entity's liable load as determined under paragraph (b) (in MW);
- HAPD* = the highest adjusted peak demand occurring in a compliance TI in the relevant *reliability gap period* where adjusted peak demand is determined under paragraph (d) (in MW);
- OITPDF* = the one-in-two year peak demand forecast (in MW),

except that if $OITPDF/HAPD > one$, then it is taken to be equal to one.

Note

Section 14R(2) of the *NEL* states –

The liable entity must comply with the obligation that the liable entity's net contract position for the *trading interval* is not less than the liable entity's share of the one-in-two year peak demand forecast for the *trading interval* determined in accordance with the *Rules*.

Section 14R(2) is a reliability obligation civil penalty.

- (b) A liable entity's liable load for a compliance TI is calculated as follows:
 - (1) if the liable entity is a *Market Participant*, determine the aggregate of the *adjusted metered energy* for each *connection point* for which it is

financially responsible for the compliance TI (less any *adjusted metered energy* allocated to a prescribed opt-in customer at one of those *connection points* and excluding any *market connection point* for a *market generating unit* or *small generating unit*) based on the relevant *routine revised statements* for the *billing periods* relating to the *reliability gap period* given approximately 30 weeks after the relevant *billing period*;

- (2) if the liable entity is not a *Market Participant*, determine the aggregate of the adjusted metered energy for each *connection point* for which it is registered as an opt-in customer (or part thereof if it is a prescribed opt-in customer registered for a portion of the *load* at that *connection point*) based on the relevant *routine revised statements* provided to the relevant *Market Participant* for the *connection points* for the *billing periods* relating to the *reliability gap period* given approximately 30 weeks after the relevant *billing period*;

- (2A) the adjusted metered energy for a *connection point* for a compliance TI is calculated as follows:

$$\text{AME} = \text{ME} \times \text{DLF}$$

where:

AME is the adjusted metered energy amount to be determined;

ME is the amount of electrical *energy*, expressed in MWh, flowing at the *connection point* in the *trading interval*, as recorded in the *metering data* in respect of that *connection point* and that *trading interval* (expressed as a positive value where the flow is towards the *transmission network connection point* to which the *connection point* is assigned and a negative value where the flow is in the other direction); and

DLF is the *distribution loss factor* applicable at that *connection point*;

- (3) adjust the quantity in subparagraph (1) or (2) (as applicable) by adding:
- (i) the liable entity's measured actual demand response (including from the dispatch of a voluntarily scheduled resource but excluding other than wholesale demand response) under a qualifying contract at each *connection point* for which it is *financially responsible* for the compliance TI, or registered if an opt-in customer, multiplied by the *distribution loss factor* for that *connection point*; **and**
 - (ii) the *wholesale demand response settlement quantity* for each *connection point* for which the liable entity is *financially responsible* for the compliance TI;
- (4) adjust the quantities in subparagraphs (1), (2) and (3) (as applicable) for *intra-regional loss factors* at the *transmission network connection point* to which the *connection point* is assigned; and
- (5) multiply the final quantity by the number of *trading intervals* in an hour,

in each case, as determined in accordance with the *PoLR cost procedures*. To avoid doubt, a liable entity's demand is not to be adjusted for what its demand would have been but for *unserved energy* during a compliance TI.

- (c) For a liable entity that is a *Market Participant*, a liable entity's liable load relates to the *connection points* for which that liable entity is *financially responsible* for a compliance TI and those *connection points* do not need to be the same *connection points* referred to in clause 4A.D.2.
- (d) The adjusted peak demand for a compliance TI is the actual demand for the *region* in that compliance TI as determined under clause 4A.A.4(b) adjusted for:
 - (1) the measured actual demand response of all liable entities during that compliance TI (including from the dispatch of voluntarily scheduled resources but excluding other than ~~wholesale demand response~~) as determined in accordance with the *PoLR cost procedures*; and
 - (2) the *wholesale demand response settlement quantities* for that compliance TI for all *connection points* for which a liable entity is *financially responsible*.

CHAPTER 10

0. Glossary

activate

Other than for *scheduled resources*, tThe operation of a *generating unit* (~~other than a *scheduled generating unit*~~) or a *bidirectional unit* (~~other than a *scheduled bidirectional unit*~~) at an increased loading level or a reduction in demand (~~other than a *scheduled load*~~) undertaken in response to a request by *AEMO* in accordance with an *unscheduled reserve contract*.

AEMO intervention event

An event where *AEMO* intervenes in the *market* under the *Rules* by:

- (a) issuing a *direction* in accordance with clause 4.8.9; or
- (b) exercising the *reliability and emergency reserve trader* in accordance with rule 3.20 by:
 - (1) *dispatching scheduled generating units, scheduled bidirectional units, wholesale demand response units, scheduled network services, voluntarily scheduled resources* or *scheduled loads* in accordance with a *scheduled reserve contract*; or
 - (2) *activating unscheduled reserves* available under an *unscheduled reserve contract*.

AEMO price responsive reporting guidelines

The guidelines made by *AEMO* under clause 3.10B.1(e).

AER price responsive reporting guidelines

The guidelines made by the *AER* under clause 3.10B.2(f).

affected load

A *scheduled load*, ~~or *scheduled bidirectional unit*~~ or *voluntarily scheduled resource* in respect of which a *Market Customer*, ~~or *Integrated Resource Provider*~~ or *Voluntarily Scheduled Resource Provider* is an *Affected Load Participant*.

Affected Load Participant

A person who satisfies paragraph (a) or (b), to the extent provided for in the paragraph:

- (a) In respect of a particular *direction* in an *intervention price trading interval*, a *Market Customer* in respect of its *scheduled load*, ~~or an *Integrated Resource Provider*~~ in respect of its *scheduled bidirectional unit* or *scheduled load* or a *Voluntarily Scheduled Resource Provider* in respect of its *voluntarily*

scheduled resource (that is not an inactive voluntarily scheduled resource or a suspended voluntarily scheduled resource), where:

- (1) the ~~scheduled load~~, ~~or~~ ~~scheduled bidirectional unit~~ or voluntarily scheduled resource was not the subject of that *direction*; and
- (2) the *dispatched load* quantity of the ~~scheduled load~~, ~~or~~ ~~scheduled bidirectional unit~~ or voluntarily scheduled resource was affected by that *direction*,

but to avoid doubt, if the ~~Market Customer~~, ~~or~~ ~~Integrated Resource Provider~~ or Voluntarily Scheduled Resource Provider was given the *direction*, it is only an *Affected Load Participant* in respect of those ~~scheduled loads~~, ~~or~~ ~~scheduled bidirectional units~~ or voluntarily scheduled resources that satisfy subparagraphs (a)(1) and (a)(2).

- (b) In relation to the exercise of the *RERT* under rule 3.20, a *Market Customer* in respect of its *scheduled load*, ~~or~~ an *Integrated Resource Provider* in respect of its *scheduled bidirectional unit* or *scheduled load* or a Voluntarily Scheduled Resource Provider in respect of its voluntarily scheduled resource (that is not an inactive voluntarily scheduled resource or a suspended voluntarily scheduled resource), where:

- (1) the ~~scheduled load~~, ~~or~~ ~~scheduled bidirectional unit~~ or voluntarily scheduled resource was not *dispatched* under a *scheduled reserve contract* and the *dispatched load* quantity of the ~~scheduled load~~, ~~or~~ ~~scheduled bidirectional unit~~ or voluntarily scheduled resource was affected by the *dispatch* of other *scheduled reserve* under a *scheduled reserve contract*; or
- (2) the *dispatched load* quantity of the ~~scheduled load~~, ~~or~~ ~~scheduled bidirectional unit~~ or voluntarily scheduled resource was affected by the *activation* of *unscheduled reserves* available under an *unscheduled reserve contract*.

Affected Participant

A person who satisfies any of paragraphs (a) to (d), to the extent provided for in the paragraph:

- (a) In respect of a particular *direction* in an *intervention price trading interval*, a *Scheduled Generator* in respect of its *scheduled generating unit*, a *Scheduled Integrated Resource Provider* in respect of its *scheduled bidirectional unit*, a Voluntarily Scheduled Resource Provider in respect of its voluntarily scheduled resource (that is not an inactive voluntarily scheduled resource or a hibernated voluntarily scheduled resource) or a *Scheduled Network Service Provider* in respect of its *scheduled network service*, where:

- (1) the *scheduled generating unit*, *scheduled bidirectional unit*, voluntarily scheduled resource or *scheduled network service* was not the subject of the *direction*; and
- (2) the *dispatched generation* quantity of the ~~scheduled generating unit~~, ~~or~~ ~~scheduled bidirectional unit~~, voluntarily scheduled resource or the *dispatched network service* quantity of the *scheduled network service* (as applicable) was affected by that *direction*,

but to avoid doubt, if the *Scheduled Generator*, *Scheduled Integrated Resource Provider*, *Voluntarily Scheduled Resource Provider* or *Scheduled Network Service Provider* was given the *direction*, it is only an *Affected Participant* in respect of those *scheduled generating units*, *scheduled bidirectional units*, *voluntarily scheduled resources* or *scheduled network services* that satisfy subparagraphs (a)(1) and (a)(2).

- (b) In respect of a particular *direction* in an *intervention price trading interval*, an *eligible person* entitled to receive an amount from *AEMO* pursuant to clause 3.18.1(b)(1) where there has been a change in flow of a *directional interconnector*, for which the *eligible person* holds units for the *intervention price trading interval*, as a result of the *direction*.
- (c) In relation to the exercise of the *RERT* under rule 3.20, a *Scheduled Generator* in respect of its *scheduled generating unit*, a *Scheduled Integrated Resource Provider* in respect of its *scheduled bidirectional unit*, a *Voluntarily Scheduled Resource Provider* in respect of its *voluntarily scheduled resource* (that is not an *inactive voluntarily scheduled resource* or a *hibernated voluntarily scheduled resource*) or a *Scheduled Network Service Provider* in respect of its *scheduled network service*, where:
 - (1) the *scheduled generating unit*, *scheduled bidirectional unit*, *voluntarily scheduled resource* or *scheduled network service* was not dispatched under a *scheduled reserve contract* and the dispatched generation quantity of the *scheduled generating unit* ~~or~~, *scheduled bidirectional unit*, *voluntarily scheduled resource* or the dispatched network service quantity of the *scheduled network service* (as applicable) was affected by the *dispatch* of other *scheduled reserves* under a *scheduled reserve contract*; or
 - (2) the *dispatched generation quantity* of the *scheduled generating unit* ~~or~~ *scheduled bidirectional unit*, *voluntarily scheduled resource* or the *dispatched network service quantity* of the *scheduled network service* (as applicable) was affected by the *activation* of *unscheduled reserves* available under an *unscheduled reserve contract*.
- (d) In relation to the exercise of the *RERT* under rule 3.20, an *eligible person* entitled to receive an amount from *AEMO* pursuant to clause 3.18.1(b)(1) where there has been a change in flow of a *directional interconnector*, for which the *eligible person* holds units for the *intervention price trading interval*, as a result of the *dispatch* of *scheduled reserves* under a *scheduled reserve contract* or the *activation* of *unscheduled reserves* available under an *unscheduled reserve contract*.

affected production unit

A *scheduled generating unit* ~~or~~, *scheduled bidirectional unit* or *voluntarily scheduled resource* in respect of which a *Scheduled Generator* ~~or~~, a *Scheduled Integrated Resource Provider* or *Voluntarily Scheduled Resource Provider* is an *Affected Participant*.

AGC (automatic generation control system)

The system into which the *loading levels* from economic *dispatch* will be entered for *generating units* and ~~*scheduled*~~ *bidirectional units* operating on automatic generation control.

Ancillary Service Provider

A person who has, in accordance with Chapter 2, classified a *generating unit*, *bidirectional unit*, *voluntarily scheduled resource* or other *connected plant* as an *ancillary service unit*.

ancillary service unit

A *generating unit*, *bidirectional unit*, *voluntarily scheduled resource* or other *connected plant* that has been classified in accordance with Chapter 2 as an *ancillary service unit*.

available capacity

- (a) The total MW capacity available for *dispatch* by a *scheduled generating unit*, *semi-scheduled generating unit*, *scheduled bidirectional unit*, *voluntarily scheduled resource* or *scheduled load* (i.e. maximum plant availability) or, in relation to a specified *price band*, the MW capacity within that *price band* available for *dispatch* (i.e. availability at each *price band*).
- (b) For a *wholesale demand response unit*, subject to clauses 3.8.2A(b), (c), (d) and (e):
 - (1) the total MW capacity available for *dispatch* by the *wholesale demand response unit* (i.e. maximum plant availability); and
 - (2) in relation to a specified *price band*, the MW capacity within that *price band* available for *dispatch* (i.e. availability at each *price band*).

energy constraint

A limitation on the ability of a *production unit* or group of *production units* to generate *active power* due to the restrictions in the availability of fuel, stored energy or other necessary expendable resources such as, but not limited to, gas, coal, or water for operating turbines or for cooling.

[ERC0332 - 31 July 2025](#)

In chapter 10, omit and substitute the following definition in alphabetical order:

energy constraint

A limitation on the quantity of *energy* (expressed in MWh) that a *scheduled generating unit*, *scheduled bidirectional unit*, *voluntarily scheduled resource* or *scheduled load* can produce or consume in a specified period.

hibernated voluntarily scheduled resource

A voluntarily scheduled resource that has its status recorded as hibernated in accordance with [clause 3.10A.2(o)(1).]

inactive voluntarily scheduled resource

A voluntarily scheduled resource that has its status recorded as inactive in accordance with clause 3.10A.2(e)(1).

Market Participant

A *Market Generator, Integrated Resource Provider* (other than a *Non-Market Integrated Resource Provider*), *Market Customer, Demand Response Service Provider*, ~~or~~ *Market Network Service Provider* or *Voluntarily Scheduled Resource Provider*.

Market Suspension Compensation Claimant

- (a) A *Scheduled Generator, Scheduled Integrated Resource Provider* ~~or~~, a *Demand Response Service Provider* or *Voluntarily Scheduled Resource Provider* who supplied energy or wholesale demand response during a market suspension pricing schedule period:
 - (1) in a *suspended region*; or
 - (2) in a *region* where *spot prices* were affected in accordance with clause 3.14.5(f); or
- (b) an *Ancillary Service Provider* in a *suspended region*, in respect of an *ancillary service unit* which is also a *scheduled resource*, who provided market *ancillary services* during a market suspension pricing schedule period.

network support payment

Any of the following payments:

- (a) a payment made by a *Transmission Network Service Provider* to:
 - (1) any *Generator* or *Integrated Resource Provider* providing *network support services* in accordance with clause 5.3A.12; or
 - (2) any other person providing a *network support service* that is an alternative to *network augmentation*;
- (b) an *inertia service payment*; and
- (c) a *system strength service payment*.

PASA availability

The *physical plant capability* (taking ambient weather conditions into account in the manner described in the procedure prepared under clause 3.7.2(g)) of a *scheduled generating unit, scheduled load* or *scheduled network service* available in a particular period, including any *physical plant capability* that can be made available during that period, on 24 hours' notice.

For a *wholesale demand response unit*, the maximum MW *wholesale demand response* available in a particular period, including any *wholesale demand response* that can be made available during that period, on 24 hours' notice.

[ERC0332 - 31 July 2025](#)

In chapter 10, omit and substitute the following definition in alphabetical order:

PASA availability

For a *scheduled generating unit, scheduled bidirectional unit, scheduled load*, *voluntarily scheduled resource* or *scheduled network service* in a given period, its available *physical plant capability* (taking ambient weather conditions into account) and any additional *physical plant capability* that can be made available

during that period within a given recall period in accordance with the *reliability standard implementation guidelines*.

For a *wholesale demand response unit* in a given period, it is the maximum available MW *wholesale demand response*, including any *wholesale demand response* that can be made available during that period within a given recall period in accordance with the *reliability standard implementation guidelines*.

qualifying resource

Has the meaning given in clause [3.10A.1(a)].

scheduled reserve

The amount of surplus or unused capacity:

- (a) of *scheduled generating units*;
- (a1) of *scheduled bidirectional units*;
- (a2) of *voluntarily scheduled resources*;
- (b) of *scheduled network services*;
- (c) of *wholesale demand response units*; or
- (d) arising out of the ability to reduce *scheduled loads*.

scheduled resource

According to context:

- (a) a *scheduled generating unit*, a *semi-scheduled generating unit*, a *scheduled bidirectional unit*, a *wholesale demand response unit*, a *scheduled network service*, ~~or~~ a *scheduled load* or a *voluntarily scheduled resource*; or
- (b) in respect of a *Registered Participant*, a *scheduled generating unit*, a *semi-scheduled generating unit*, a *scheduled bidirectional unit*, a *wholesale demand response unit*, a *scheduled network service*, ~~or~~ a *scheduled load* or a *voluntarily scheduled resource* classified by or in respect to that *Registered Participant* in accordance with Chapter 2.

unscheduled reserve

Excluding *scheduled resources*, ~~The amount of surplus or unused capacity:~~

- (a) of *generating units* ~~(other than *scheduled generating units*)~~; or
- (a1) of *bidirectional units* ~~(other than *scheduled bidirectional units*)~~; or
- (b) arising out of the ability to reduce demand ~~(other than a *scheduled load* or *wholesale demand response unit*)~~.

voluntarily scheduled resource

Includes each of the following:

- (a) an individual *qualifying resource* associated with a *NMI* that has been approved by *AEMO* for nomination as a *voluntarily scheduled resource* in accordance with clause 3.10A.1 and has not been aggregated under clause 3.8.3;

(b) two or more *qualifying resources* associated with *NMIs* that have been approved by *AEMO* for nomination as a *voluntarily scheduled* resource in accordance with clause 3.10A.1 and have been aggregated under clause 3.8.3.

voluntarily scheduled resource guidelines

The guidelines made by *AEMO* under clause 3.10A.3.

Voluntarily Scheduled Resource Provider

A *Market Participant* in respect of which any *voluntarily scheduled resource* is nominated in accordance with clause 3.10A.1.

VSR incentive mechanism

The mechanism constituting two or more *VSR* tender processes run by *AEMO* under clause 3.10A.4, to incentivise *Market Participants* with *qualifying resources* to participate in *central dispatch*.

VSR incentive procedures

The procedures made by *AEMO* under clause 3.10A.4(d) for the *VSR incentive mechanism*.

VSR participation agreement

A contract between *AEMO* and a successful *VSR* incentive mechanism participant described in clause 3.10A.4(j).

Schedule [x] Savings and Transitional Amendment to the National Electricity Rules

[1] New Rule 11.17[X] Rules consequential on the making of the draft National Electricity Amendment (Integrating price-responsive resources into the NEM) Rule 2024

11.17[X].1 Definitions

- (a) In this rule 11.17[X]:

Amending Rule means the draft *National Electricity Amendment (Integrating price-responsive resources into the NEM) Rule 2024*.

Contracts and Firmness Guidelines has the meaning given in clause 4A.A.1.

Demand Side Participation Information Portal is the portal established by *AEMO* for the purposes of rule 3.7D.

new clause 3.10B.2(b) means clause 3.10B.2(b) of the *Rules* as in force on the reporting rules commencement date.

new clause 3.10B.2(c) means clause 3.10B.2(c) of the *Rules* as in force on the reporting rules commencement date.

new clause 3.10B.3(b) means clause 3.10B.3(b) of the *Rules* as in force on the reporting rules commencement date.

reporting rules commencement date means 1 January 2026.

schedule of benchmark values has the meaning given in clause 3.14.5A(j).

- (b) In this rule, an italicised term that is not defined in Chapter 10 of the *Rules* has the meaning given to that term in the Amending Rule.

11.17[X].2 Amendments to guidelines and other instruments

- (a) By 1 June 2026, the *AER* must review and, where it considers it necessary or desirable, amend and *publish* guidelines and other documents published by the *AER*, including the following guidelines, to take into account the Amending Rule:
- (1) the Contracts and Firmness Guidelines; and
 - (2) the guidelines developed under clause 3.8.22.
- (b) By 1 June 2026, *AEMO* must must review and, where it considers it necessary or desirable, amend and publish procedures, guidelines and other documents published by *AEMO*, including the following, to take into account the Amending Rule:

- (1) the *market suspension compensation methodology* and schedule of benchmark values;
 - (2) the Demand Side Participation Information Portal and associated demand side participation information guidelines; and
 - (3) the *DER Register* and associated *DER register information guidelines*.
- (c) In amending the documents referred to in paragraphs (a) and (b), the *AER* and *AEMO* must follow the process for amending those documents specified in the *Rules*, or if no process is specified, the *Rules consultation procedures*.

11.17[X].3 New guidelines and procedures

- (a) *AEMO* must, in accordance with the *Rules consultation procedures*, develop and publish:
- (1) the *AEMO price responsive reporting guidelines* by 31 December 2025;
 - (2) the *voluntarily scheduled resource guidelines* by 31 December 2025; and
 - (3) the *VSR incentive procedures* by 1 November 2026.
- (b) By 31 December 2025, the *AER* must develop and *publish* the *AER price responsive reporting guidelines*, in accordance with the *Rules consultation procedures* or, if the *AER* includes those guidelines in the *wholesale market monitoring guidelines*, in accordance with clause 8.7.2.
- (c) By 5 November 2029, *AEMO* must review the *voluntarily scheduled resource guidelines* and, if at the conclusion of that review, *AEMO* considers that changes are necessary or desirable, *AEMO* must amend the *voluntarily scheduled resource guidelines* in accordance with the *Rules consultation procedures*.

11.17[X].4 First price responsive resource reports by AEMO and AER

- (a) For the purposes of new clause 3.10B.2(c), *AEMO* is not required to publish the single source of information until 1 April 2026, in respect of information for the preceding calendar quarter.
- (b) By 30 September 2026, *AEMO* must publish the first report required by new clause 3.10B.2(b).
- (c) The first annual report published by *AEMO* pursuant to paragraph (b) is not required to cover the entire *financial year* ending 30 June 2026, but instead, must:
- (1) cover the period from 1 January 2026 to 30 June 2026; and
 - (2) also include an analysis of trends in the use and impact of *price responsive resources* over the preceding three years, where such analysis is based on information reasonably available to *AEMO* at the time.
- (d) By 31 December 2026, the *AER* must *publish* the first annual report required by new clause 3.10B.3(b).

- (e) The first annual report *published* by the *AER* pursuant to paragraph (d) is not required to cover the entire *financial year* ending 30 June 2026, but instead, must:
 - (1) cover the period from 1 January 2026 to 30 June 2026; and
 - (2) also include commentary on the trends identified by *AEMO* pursuant to paragraph (c)(2).