



## **Draft National Electricity Amendment (Wholesale demand response mechanism) Rule 2019**

under the National Electricity Law to the extent applied by:

- (a) the National Electricity (South Australia) Act 1996 of South Australia;
- (b) the Electricity (National Scheme) Act 1997 of the Australian Capital Territory;
- (c) the Electricity - National Scheme (Queensland) Act 1997 of Queensland;
- (d) the Electricity - National Scheme (Tasmania) Act 1999 of Tasmania;
- (e) the National Electricity (New South Wales) Act 1997 of New South Wales;
- (f) the National Electricity (Victoria) Act 2005 of Victoria;
- (g) the National Electricity (Northern Territory) (National Uniform Legislation) Act 2015 of the Northern Territory; and
- (h) the Australian Energy Market Act 2004 of the Commonwealth.

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

John Pierce  
Chairman  
Australian Energy Market Commission

## **Draft National Electricity Amendment (Wholesale demand response mechanism) Rule 2019**

### **1 Title of Rule**

This Rule is the *Draft National Electricity Amendment (Wholesale demand response mechanism) Rule 2019*.

### **2 Commencement**

Schedule 1 commences operation on 1 July 2022.

Schedule 2 commences operation on 31 March 2021.

Schedule 3 commences operation on 1 July 2022.

Schedule 4 commences operation on 1 July 2022.

Schedule 5 commences operation on 1 July 2022.

Schedule 6 commences operation on 14 November 2019.

### **3 Amendment to the National Electricity Rules**

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

### **4 Amendment to the National Electricity Rules**

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

### **5 Amendment to the National Electricity Rules**

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

### **6 Amendment to the National Electricity Rules**

The National Electricity Rules are amended as set out in Schedule 4.

### **7 Amendment to the National Electricity Rules**

The National Electricity Rules are amended as set out in Schedule 5.

### **8 Savings and Transitional Amendment to the National Electricity Rules**

The National Electricity Rules are amended as set out in Schedule 6.

## Schedule 1 Amendment to the National Electricity Rules

(Clause 3)

### [1] Clause 2.3.5 Ancillary services load

In clause 2.3.5(a), omit all occurrences of "*Market Ancillary Service Provider*" and substitute "*Demand Response Service Provider*".

### [2] Clause 2.3.5 Ancillary services load

In clause 2.3.5(b)(1), omit "*Market Ancillary Service Provider*" and substitute "*Demand Response Service Provider*".

### [3] Clause 2.3.5 Ancillary services load

At the end of clause 2.3.5(b)(1), omit "and".

### [4] Clause 2.3.5 Ancillary services load

In clause 2.3.5(b)(2), omit "*Market Ancillary Service Provider*" and substitute "*Demand Response Service Provider*".

### [5] Clause 2.3.5 Ancillary services load

At the end of clause 2.3.5(b)(2), omit "." and substitute ";".

### [6] Clause 2.3.5 Ancillary services load

After clause 2.3.5(b)(2), insert:

- (3) identify the units of *load* under the applicant's ownership, operation or control; and
- (4) demonstrate how the units of *load* identified in subparagraph (3):
  - (i) are under the applicant's ownership, operation or control; and
  - (ii) have the required equipment to be used to provide *market ancillary service* and will be capable of meeting or exceeding the relevant *performance standards* and specifications to *AEMO's* satisfaction.

### [7] Clause 2.3.5 Ancillary services load

In clause 2.3.5(c)(2), omit "classification" and substitute "clarification".

**[8] Clause 2.3.5 Ancillary services load**

In clause 2.3.5(d), omit "*Market Ancillary Service Provider*" and substitute "*Demand Response Service Provider*".

**[9] Clause 2.3.5 Ancillary services load**

In clause 2.3.5(e)(1A), omit "*Market Ancillary Service Provider*" and substitute "*Demand Response Service Provider*".

**[10] Clause 2.3.5 Ancillary services load**

In clause 2.3.5(e)(2), omit "*Market Ancillary Service Provider*" and substitute "*Demand Response Service Provider*".

**[11] Clause 2.3.5 Ancillary services load**

In clause 2.3.5(f), omit "*Market Ancillary Service Provider*" and substitute "*Demand Response Service Provider*".

**[12] Clause 2.3.5 Ancillary services load**

In clause 2.3.5(g), omit "*Market Ancillary Service Provider*" and substitute "*Demand Response Service Provider*".

**[13] Clause 2.3.5 Ancillary services load**

In clause 2.3.5(g)(4), omit "*Market Ancillary Service Provider*" and substitute "*Demand Response Service Provider*".

**[14] Clause 2.3.5 Ancillary services load**

In clause 2.3.5(h), omit "*Market Ancillary Service Provider*" and substitute "*Demand Response Service Provider*".

**[15] Clause 2.3.5 Ancillary services load**

In clause 2.3.5(i), omit "*Market Ancillary Service Provider*" and substitute "*Demand Response Service Provider*".

**[16] Clause 2.3.5 Ancillary services load**

In clause 2.3.5(j), omit "*Market Ancillary Service Provider*" and substitute "*Demand Response Service Provider*".

**[17] New clause 2.3.6 Wholesale demand response units**

After clause 2.3.5, insert:

### 2.3.6 Wholesale demand response units

- (a) If a *Demand Response Service Provider* in respect of a *load* wishes to use the *load* to provide *wholesale demand response* in accordance with Chapter 3, the *Demand Response Service Provider* must:
  - (1) apply to *AEMO* for approval to classify the *load* as a *wholesale demand response unit*; and
  - (2) allocate the *load* to a *scheduled wholesale demand response unit* established in accordance with clause 2.3.7; and
  - (3) where the allocation under subparagraph (2) will result in aggregation of two or more *wholesale demand response units*, apply to *AEMO* for approval to aggregate under clause 3.8.3.
- (b) A *load* is not eligible for classification as a *wholesale demand response unit* if any *retail customer* at any *connection point* for the *load* (including any *child connection point*) is a *small customer*.
- (c) To be eligible for classification as a *wholesale demand response unit*:
  - (1) unless the *Demand Response Service Provider* is also the *retail customer* for the *load*, the *Demand Response Service Provider* must have an arrangement with the *retail customer* at each *connection point* for the *load* for the provision of *wholesale demand response*;
  - (2) the *Demand Response Service Provider* must have nominated a *baseline methodology* to apply to the *wholesale demand response unit* that:
    - (i) when applied, produces a *baseline* that satisfies the *baseline methodology metrics*; and
    - (ii) otherwise qualifies for application to the *wholesale demand response unit* having regard to any criteria in the *wholesale demand response guidelines*;
  - (3) each *connection point* associated with the *load* must have a type 1, 2, 3, or 4 *metering installation*;
  - (4) adequate communications and/or telemetry must be in place to support the issuing of *dispatch instructions* in respect of the *load*, together with other *loads* forming part of the *scheduled wholesale demand response unit* to which it is allocated and the audit of responses;
  - (5) the *load* must not be a *market load* that is a *scheduled load*; and
  - (6) in respect of each other requirement for classification as a *wholesale demand response unit* in the *wholesale demand response guidelines*:

- (i) the *load* must satisfy the requirement; or
  - (ii) the requirement must have been waived by *AEMO* in respect of the *load* in accordance with the *wholesale demand response guidelines*.
- (d) An application under paragraph (a) must be in the form prescribed by *AEMO* and must:
  - (1) identify the *load* by reference to the applicable *NMI*;
  - (2) demonstrate how the *load* identified in subparagraph (1):
    - (i) is under the applicant's operation or control; and
    - (ii) has the required equipment to be used to provide *wholesale demand response*;
  - (3) nominate the *baseline methodology* the *Demand Response Service Provider* proposes be applied to the *wholesale demand response unit* or include the *Demand Response Service Provider's* proposal for a *baseline methodology* made in accordance with the *wholesale demand response guidelines*; and
  - (4) contain all other information required for the application under the *wholesale demand response guidelines*.
- (e) *AEMO* must, within 5 *business days* of receiving an application under paragraph (a), 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.
- (f) If the further information or clarification required pursuant to paragraph (e) is not provided to *AEMO's* satisfaction within 15 *business days* of the request, then the *Demand Response Service Provider* will be deemed to have withdrawn the application.
- (g) *AEMO* must approve the classification of a *load* the subject of an application under paragraph (a) as a *wholesale demand response unit* if *AEMO* is reasonably satisfied that the *load* is eligible in accordance with paragraphs (b) and (c) to be classified as a *wholesale demand response unit*.
- (h) If *AEMO* approves the classification of a *load* as a *wholesale demand response unit*, *AEMO* may impose on the relevant *Demand Response Service Provider* such terms and conditions as *AEMO* considers necessary to ensure that the provisions of the *Rules* applying to *wholesale demand response* can be met.

- (i) A *Demand Response Service Provider* must comply with any terms and conditions imposed by *AEMO* under paragraph (h) in respect of its *wholesale demand response unit*.
- (j) A *Demand Response Service Provider* in respect of a *load* that has been classified as a *wholesale demand response unit*, must only sell the *wholesale demand response* produced using that *load*:
  - (1) through the *spot market* in accordance with the provisions of Chapter 3; and
  - (2) as part of the *scheduled wholesale demand response unit* to which the *wholesale demand response unit* is allocated.
- (k) A *Demand Response Service Provider* must immediately notify *AEMO* if a *load* it has classified as a *wholesale demand response unit* ceases to meet the requirements for classification under this clause 2.3.6.
- (l) A *Demand Response Service Provider* must in accordance with the *wholesale demand response guidelines* provide information to *AEMO* to satisfy *AEMO* that a *load* classified as a *wholesale demand response unit* continues to meet the requirements for classification under this clause 2.3.6.
- (m) If a *load* classified as a *wholesale demand response unit* ceases to meet the requirements for classification under this clause 2.3.6, *AEMO* must in accordance with the *wholesale demand response guidelines* revoke the classification of that *load*.

### **[18] New clause 2.3.7 Scheduled wholesale demand response units**

After new clause 2.3.6, insert:

#### **2.3.7 Scheduled wholesale demand response units**

- (a) A *Demand Response Service Provider* may in accordance with the *wholesale demand response guidelines* apply to *AEMO* to establish one or more *scheduled wholesale demand response units*.
- (b) To be eligible to establish a *scheduled wholesale demand response unit*, a *Demand Response Service Provider* must satisfy *AEMO* that, subject to the requirements in clause 3.8.3 for aggregation of two or more *wholesale demand response units*, the proposed *scheduled wholesale demand response unit* is capable of providing at least 5 MW of *wholesale demand response* (when the *scheduled wholesale demand response unit* is *dispatched* to its maximum).
- (c) A *Demand Response Service Provider*:

- (1) must ensure that *wholesale demand response* provided using a *scheduled wholesale demand response unit* is provided in accordance with the co-ordinated *central dispatch* process operated by *AEMO* under the provisions of Chapter 3; and
- (2) if the *Demand Response Service Provider* submits a *dispatch offer* in respect of a *scheduled wholesale demand response unit*, must comply with the *dispatch instructions* from *AEMO* in accordance with the *Rules*.
- (d) A *Demand Response Service Provider* is not entitled to receive payment from *AEMO* for *wholesale demand response* except where the *wholesale demand response* is provided by a *scheduled wholesale demand response unit* in accordance with Chapter 3.

### **[19] Rule 2.3AA Market Ancillary Service Provider**

Omit the title of rule 2.3AA and substitute "**Demand Response Service Provider**".

### **[20] Clause 2.3AA.1 Registration**

Omit clause 2.3AA.1(a) and substitute:

- (a) A person must not engage in the activity of offering and providing *wholesale demand response* or *market ancillary services* in accordance with Chapter 3 as a *Demand Response Service Provider* unless that person is registered by *AEMO* as a *Demand Response Service Provider*.

### **[21] Clause 2.3AA.1 Registration**

Omit clause 2.3AA.1(b) and substitute:

- (b) To be eligible for registration as a *Demand Response Service Provider*, a person must satisfy *AEMO* that the person intends to classify, within a reasonable amount of time, a *load* as an *ancillary service load* in accordance with clause 2.3.5 or as a *wholesale demand response unit* in accordance with clause 2.3.6.

### **[22] Clause 2.3AA.1 Registration**

Omit clause 2.3AA.1(c) and substitute:

- (c) [Deleted]

### **[23] Clause 2.3AA.1 Registration**

Omit clause 2.3AA.1(d) and substitute:

- (d) A *Demand Response Service Provider*'s activities only relate to *loads* it has classified (in its capacity as a *Demand Response Service Provider*) as *ancillary service loads* or as a *wholesale demand*



*response unit*, and only while it is also registered with *AEMO* as a *Demand Response Service Provider*.

**[24] Clause 2.4.1            Registration as a category of Market Participant**

In clause 2.4.1(a)(1B), omit "*Market Ancillary Service Provider*" and substitute "*Demand Response Service Provider*".

**[25] Rule 2.12                Interpretation of References to Various Registered Participants**

Omit rule 2.12(b)(1B) and substitute:

(1B) a "*Demand Response Service Provider*" applies to a person registered as a "*Demand Response Service Provider*" only in so far as it is applicable to matters connected with the person's *ancillary service load* or *wholesale demand response unit*;

**[26] Rule 2.12                Interpretation of References to Various Registered Participants**

Omit rule 2.12(b)(7)(i2) and substitute:

(i2) where that person is registered as a *Demand Response Service Provider*, in so far as it is applicable to matters connected with the person's *ancillary service load*, *wholesale demand response unit* or *scheduled wholesale demand response unit*; and

## **Schedule 2          Amendment to the National Electricity Rules**

(Clause 4)

### **[1] Rule 3.7D          Demand side participation information**

In rule 3.7D(a), in the definition of **contracted demand side participation**, omit "curtailment" and substitute "adjustment".

### **[2] Rule 3.7D          Demand side participation information**

Omit rule 3.7D(b) and substitute:

- (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 relevant *Registered Participant* has no *demand side participation information* to report in respect of the relevant period, a statement to that effect.

### **[3] Rule 3.7D          Demand side participation information**

After rule 3.7D(b), omit the heading "AEMO to report on use of demand side participation information in load forecasts" and substitute "AEMO to report on demand side participation information".

### **[4] Rule 3.7D          Demand side participation information**

In rule 3.7D(c), omit "[Deleted]" and substitute:

- (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*.

### **[5] Rule 3.7D          Demand side participation information**

In rule 3.7D(e)(1)(ii), omit "curtailment" and substitute "adjustment".

### **[6] Rule 3.7D          Demand side participation information**

In rules 3.7D(e)(1)(iii), (iv) and (v), omit "curtailed" and substitute "adjusted".

**[7] Rule 3.7D Demand side participation information**

In rule 3.7D(e)(4), omit "and".

**[8] Rule 3.7D Demand side participation information**

After rule 3.7D(e)(4), insert:

- (4A) the requirements for a statement under paragraph (b)(2), if a *Registered Participant* has no *demand side participation information* to report; and

## **Schedule 3      Amendment to the National Electricity Rules**

(Clause 5)

### **[1] Clause 3.2.2      Spot market**

In the opening paragraph of clause 3.2.2, after "electricity", insert ", *wholesale demand response*".

### **[2] Clause 3.7.1      Administration of PASA**

In clause 3.7.1(c)(1), after "*Market Customers*", insert "*Demand Response Service Providers*".

### **[3] Clause 3.7.1      Administration of PASA**

In clause 3.7.1(c)(1)(i), after "*transmission*", insert ", *wholesale demand response unit*".

### **[4] Clause 3.7.1      Administration of PASA**

In clause 3.7.1(c)(1)(ii), after "availabilities", insert "or *wholesale demand response unit* availabilities".

### **[5] Clause 3.7.1      Administration of PASA**

In clause 3.7.1(c)(iii), after "*energy constraints*", insert "and *wholesale demand response constraints*".

### **[6] Clause 3.7.2      Medium term PASA**

In clause 3.7.2(d)(1), after "*scheduled generating unit*", insert "*scheduled wholesale demand response unit*".

### **[7] Clause 3.7.2      Medium term PASA**

In clause 3.7.2(d)(1), omit "and".

### **[8] Clause 3.7.2      Medium term PASA**

In clause 3.7.2(d)(2), omit "." and substitute "; and".

### **[9] Clause 3.7.2      Medium term PASA**

After clause 3.7.2(d)(2), insert:

- (3) weekly *wholesale demand response constraints* applying to each *scheduled wholesale demand response unit*.

### **[10] Clause 3.7.2      Medium term PASA**

Omit "and" at the end of clause 3.7.2(f)(5B).

**[11] Clause 3.7.2 Medium term PASA**

After clause 3.7.2(f)(5B), insert:

(5C) aggregate *scheduled wholesale demand response unit PASA availability* for each region; and

**[12] Clause 3.7.3 Short term PASA**

In clause 3.7.3(d)(1)(ii), after "other load", insert "(including *wholesale demand response units* assuming they are not providing *wholesale demand response*)".

**[13] Clause 3.7.3 Short term PASA**

At the end of clause 3.7.3(d), after "for *scheduled load*", insert "and for *dispatch offers* for *scheduled wholesale demand response units*".

**[14] Clause 3.7.3 Short term PASA**

In clause 3.7.3(e)(1), after "*scheduled generating unit*", insert "*scheduled wholesale demand response unit*".

**[15] Clause 3.7.3 Short term PASA**

In clause 3.7.3(e)(2), after "*scheduled generating unit*", insert "*scheduled wholesale demand response unit*".

**[16] Clause 3.7.3 Short term PASA**

Omit "and" at the end of clause 3.7.3(e)(2).

**[17] Clause 3.7.3 Short term PASA**

At the end of 3.7.3(e)(4), omit "." and insert "; and".

**[18] Clause 3.7.3 Short term PASA**

After clause 3.7.3(e)(4), insert:

(5) projected daily *wholesale demand response availability* for *wholesale demand response constrained scheduled wholesale demand response units*.

**[19] Clause 3.7.3 Short term PASA**

In clause 3.7.3(h)(1), after "*scheduled load*", insert "and for *scheduled wholesale demand response units* assuming no *dispatch* of any *wholesale demand response* from those units".

**[20] Clause 3.7.3 Short term PASA**

After clause 3.7.3(h)(3), insert:

- (3A) forecasts of the most probable *wholesale demand response* for each *region* and *trading day*;

**[21] Clause 3.7.3 Short term PASA**

In clause 3.7.3(h)(4), after "for each *region*", insert "and aggregate *wholesale demand response unit PASA availability*".

**[22] Clause 3.7.3 Short term PASA**

Omit "and" at the end of clause 3.7.3(h)(4AB).

**[23] Clause 3.7.3 Short term PASA**

After clause 3.7.3(h)(4AB), insert:

- (4AC) aggregate *wholesale demand response* for each *region*, after allowing for the impact of *network constraints*, calculated as the *available capacity* of *scheduled wholesale demand response units* that are able to operate at the availability as notified to *AEMO* under paragraph (e)(5);
- (4AD) aggregate *wholesale demand response* for each *region*, after allowing for the impact of *network constraints*, that cannot be provided at the *available capacity* referred to in subparagraph (4AC) due to specified daily *wholesale demand response constraints*;

**[24] Clause 3.7.3 Short term PASA**

In clause 3.7.3(h)(4A), after "for each *region*", insert "and aggregate *wholesale demand response unit PASA availability* for each *region*".

**[25] Clause 3.7.3 Short term PASA**

In clause 3.7.3(h)(4C)(ii), omit "(4), (4A), (4AA) and (4AB)" and substitute "(4), (4A), (4AA), (4AB), (4AC) and (4AD)".

**[26] Rule 3.7D Demand side participation information**

In rule 3.7D(a), in the definition of **contracted demand side participation**, after "circumstances" insert ", but excluding contractual arrangements for the provision of *wholesale demand response* by a *wholesale demand response unit*".

**[27] Rule 3.7D Demand side participation information**

In clause 3.7D(e)(1)(ii), after "subparagraph (1)(i)", insert " and excluding *wholesale demand response*".

**[28] Clause 3.8.1 Central Dispatch**

In clause 3.8.1(a), after "*semi-scheduled generating units*," insert "*scheduled wholesale demand response units*".

**[29] Clause 3.8.1 Central Dispatch**

In clause 3.8.1(b), after "*network dispatch offers*," insert "*dispatched wholesale demand response based on wholesale demand response dispatch offers*".

**[30] Clause 3.8.1 Central Dispatch**

In clause 3.8.1(b)(8), after "*dispatched generation*," insert "*dispatched wholesale demand response*".

**[31] Clause 3.8.2 Participation in central dispatch**

In clause 3.8.2(d), after "*Dispatch bids*" insert ", *wholesale demand response dispatch offers*".

**[32] New clause 3.8.2A Wholesale demand response unit participation in central dispatch**

After clause 3.8.2, insert:

**3.8.2A Wholesale demand response unit participation in central dispatch**

- (a) *A scheduled wholesale demand response unit is only eligible to participate in central dispatch where at the time for which the dispatch offer is made each wholesale demand response unit comprised in the scheduled wholesale demand response unit is baseline compliant as determined by the most recent baseline compliance testing for the wholesale demand response unit.*
- (b) *A Demand Response Service Provider must not submit a dispatch offer for a scheduled wholesale demand response unit that is not eligible under paragraph (a) to participate in central dispatch during the time for which the dispatch offer is made.*
- (c) *A Demand Response Service Provider must only make a dispatch offer to provide wholesale demand response in a trading interval where and to the extent that, if dispatched, the wholesale demand response is or will be the result of wholesale demand response activities in that trading interval.*

- (d) *AEMO* must only include *dispatch offers* in *central dispatch* in respect of *scheduled wholesale demand response units* that are eligible under paragraph (a) to participate in *central dispatch* during the time for which the *dispatch offer* is made.
- (e) Subject to paragraphs (a), (b) and (c) and clause 3.8.23(c)(6), a *Demand Response Service Provider* may submit a *dispatch offer* in respect of its *scheduled wholesale demand response unit* in accordance with clause 3.8.7B.
- (f) A *dispatch offer* in respect of a *scheduled wholesale demand response unit* is an offer to adjust the net aggregate amount of electrical *energy* flowing at *connection points* for the relevant *wholesale demand response units* by the MW amount *dispatched* by *AEMO* as the *loading level* where:
  - (1) the *dispatch instruction* specifies the net aggregate adjustment to have been achieved by the end of the *trading interval* to which it applies;
  - (2) subject to subparagraph (3), the adjustment is relative to the net aggregate amount of electrical *energy* flowing at *connection points* for the relevant *wholesale demand response units* at the start of the *trading interval*; and
  - (3) if the *scheduled wholesale demand response unit* is *dispatched* to provide *wholesale demand response* in contiguous *trading intervals*, the adjustment is relative to the net aggregate amount of electrical *energy* flowing at *connection points* for the relevant *wholesale demand response units* at the start of the first such *trading interval*.
- (g) The *loading level* of a *scheduled wholesale demand response unit* will be determined by *AEMO* in accordance with clause 3.8.1 when the *scheduled wholesale demand response unit* is being *dispatched* by *AEMO* to provide *wholesale demand response*.
- (h) The *AER* must develop *guidelines* in accordance with the *Rules consultation procedures* providing guidance to *Demand Response Service Providers* about:
  - (1) how the *AER* intends to monitor compliance by *Demand Response Service Providers* with paragraphs (b) and (c); and
  - (2) information *Demand Response Service Providers* must keep regarding the matters in paragraphs (b) and (c).
- (i) The *AER* must *publish* the *guidelines* developed under paragraph (h) and may amend the *guidelines* from time to time.



**[33] Clause 3.8.3 Bid and offer aggregation guidelines**

In clause 3.8.3(a1), omit "*Market Ancillary Service Providers*" and substitute "*Demand Response Service Providers*".

**[34] Clause 3.8.3 Bid and offer aggregation guidelines**

After clause 3.8.3(a1), insert:

- (a2) *Demand Response Service Providers* who wish to aggregate two or more *wholesale demand response units* so they are allocated to the same *scheduled wholesale demand response unit* for the purpose of *central dispatch*, must apply to *AEMO* to do so.

**[35] Clause 3.8.3 Bid and offer aggregation guidelines**

In clause 3.8.3(b1)(1), omit "*Market Ancillary Service Provider*" and substitute "*Demand Response Service Provider*".

**[36] Clause 3.8.3 Bid and offer aggregation guidelines**

After clause 3.8.3(b1), insert:

- (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; and
  - (3) *control systems* must satisfy the requirements of clauses 2.3.6(c)(3) and (4) after aggregation.

**[37] Clause 3.8.3 Bid and offer aggregation guidelines**

After clause 3.8.3(f), insert:

- (f1) *Demand Response Service Providers* that have been granted aggregated status must, if required by *AEMO*, declare individual *wholesale demand response unit* availability and operating status to *AEMO* in the *PASA* process under rule 3.7 to allow *power system security* to be effectively monitored.

**[38] Clause 3.8.3 Bid and offer aggregation guidelines**

In clause 3.8.3(h), after "*semi-scheduled generating units*," insert "*scheduled wholesale demand response units*".

**[39] Clause 3.8.3A Ramp rates**

In clause 3.8.3A(a), after "*Market Participant with generating units*", insert "*scheduled wholesale demand response units*".

**[40] Clause 3.8.3A Ramp rates**

In clause 3.8.3A(a)(2)(iv), omit "and".

**[41] Clause 3.8.3A Ramp rates**

After clause 3.8.3A(a)(2)(iv), insert:

- (v) clause 3.8.7B; and

**[42] Clause 3.8.4 Notification of scheduled capacity**

In the opening paragraph of clause 3.8.4, after "*with scheduled generating units*", insert "*scheduled wholesale demand response units*".

**[43] Clause 3.8.4 Notification of scheduled capacity**

In clause 3.8.4(a), after "*each scheduled generating unit*", insert "*scheduled wholesale demand response unit*".

**[44] Clause 3.8.4 Notification of scheduled capacity**

In clause 3.8.4(b), omit "(d) and (e)" and substitute "(d), (e) and (f)".

**[45] Clause 3.8.4 Notification of scheduled capacity**

At the end of clause 3.8.4(e)(2), omit "." and substitute "; and".

**[46] Clause 3.8.4 Notification of scheduled capacity**

After clause 3.8.4(e), insert:

- (f) for *scheduled wholesale demand response units*, two days ahead of each *trading day*:
  - (1) a MW capacity profile that 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*.

**[47] Clause 3.8.5 Submission timing**

In clause 3.8.5(b)(2), omit "and".

**[48] Clause 3.8.5 Submission timing**

In clause 3.8.5(b)(3), omit ", " and substitute "; and".

**[49] Clause 3.8.5 Submission timing**

After clause 3.8.5(b)(3), insert:

- (4) MW quantities in *wholesale demand response dispatch offers*,

**[50] New clause 3.8.7B Wholesale demand response dispatch offers**

After clause 3.8.7A, insert:

**3.8.7B Wholesale demand response dispatch offers**

- (a) *A Demand Response Service Provider's wholesale demand response dispatch offer must specify for each of the 288 trading intervals in the trading day if the Demand Response Service Provider is participating in central dispatch in respect of its scheduled wholesale demand response unit in the trading interval.*
- (b) *Where the Demand Response Service Provider is participating in central dispatch in respect of its scheduled wholesale demand response unit in a trading interval, its wholesale demand response dispatch offer for the trading interval:*
  - (1) *may contain up to 10 price bands;*
  - (2) *must specify:*
    - (i) *an incremental MW amount for each price band specified in the dispatch offer;*
    - (ii) *an up ramp rate and a down ramp rate; and*
  - (3) *must specify a profile of the net aggregate amount of electrical energy flowing at connection points for the relevant wholesale demand response units, in MW relative to a loading level of zero, that:*
    - (i) *will apply if the scheduled wholesale demand response unit is dispatched to provide wholesale demand response; and*
    - (ii) *is for the 6 trading intervals immediately following the last trading interval in which the scheduled wholesale demand response unit is dispatched to provide wholesale demand response.*

**[51] Clause 3.8.8 Validation of dispatch bids and offers**

In clause 3.8.8(a), omit "3.8.7 or 3.8.7A" and substitute "3.8.7, 3.8.7A or 3.8.7B".

**[52] Clause 3.8.8 Validation of dispatch bids and offers**

In clause 3.8.8(c), omit "3.8.7 or 3.8.7A" and substitute "3.8.7, 3.8.7A or 3.8.7B".

**[53] Clause 3.8.9 Default offers and bids**

In clause 3.8.9(a), after "*semi-scheduled generating unit*", insert "*scheduled wholesale demand response unit*".

**[54] Clause 3.8.9 Default offers and bids**

In clause 3.8.9(c), omit "3.8.7A" and substitute "3.8.7A, 3.8.7B".

**[55] Clause 3.8.10 Network constraints**

In clause 3.8.10(a), after "*semi-scheduled generating units*", insert "*scheduled wholesale demand response units*".

**[56] Clause 3.8.10 Network constraints**

In clause 3.8.10(e)(2), after "*semi-scheduled generating units*", insert "*scheduled wholesale demand response units*".

**[57] Clause 3.8.14 Dispatch under conditions of supply scarcity**

In clause 3.8.14(b)(3), after "*dispatching scheduled generating units*", insert "*scheduled wholesale demand response units*".

**[58] Clause 3.8.16 Equal priced dispatch bids and dispatch offers**

In clause 3.8.16, after "*scheduled generating units*", insert "*scheduled wholesale demand response units*".

**[59] Clause 3.8.19 Dispatch inflexibilities**

In clause 3.8.19(a), after "*scheduled generating units*", insert "*scheduled wholesale demand response units*".

**[60] Clause 3.8.19 Dispatch inflexibilities**

In clause 3.8.19(a), after each occurrence of "*scheduled generating unit*", insert "*scheduled wholesale demand response unit*".

**[61] Clause 3.8.19 Dispatch inflexibilities**

In clause 3.8.19(a2)(1), after each occurrence of "*semi-scheduled generating unit*", insert "*scheduled wholesale demand response unit*".

**[62] Clause 3.8.19 Dispatch inflexibilities**

In clause 3.8.19(a2)(2), after each occurrence of "*semi-scheduled generating unit*", insert "*scheduled wholesale demand response unit*".

**[63] Clause 3.8.19 Dispatch inflexibilities**

In clause 3.8.19(b), after "*semi-scheduled generating unit*", insert "*scheduled wholesale demand response unit*".

**[64] Clause 3.8.19 Dispatch inflexibilities**

In clause 3.8.19(b)(1), after "*semi-scheduled generating unit*", insert "*scheduled wholesale demand response unit*".

**[65] Clause 3.8.19 Dispatch inflexibilities**

In clause 3.8.19(c), after each occurrence of "*semi-scheduled generating unit*", insert "*scheduled wholesale demand response unit*".

**[66] Clause 3.8.19 Dispatch inflexibilities**

In clause 3.8.19(d), after each occurrence of "*scheduled loads*", insert "*scheduled wholesale demand response units*".

**[67] Clause 3.8.19 Dispatch inflexibilities**

After clause 3.8.19(f), insert:

- (f1) A *dispatch inflexibility profile* for a *scheduled wholesale demand response unit* must contain parameters to indicate its MW capacity and time related *inflexibilities*.

**[68] Clause 3.8.20 Pre-dispatch schedule**

In clause 3.8.20(g), after "*Scheduled Generator*", insert "*Demand Response Service Provider*".

**[69] Clause 3.8.20 Pre-dispatch schedule**

In clause 3.8.20(g), omit "plant" and substitute "*plant*".

**[70] Clause 3.8.20 Pre-dispatch schedule**

In clause 3.8.20(j), after "*generating unit*", insert "*scheduled wholesale demand response unit*".

**[71] Clause 3.8.21 On-line dispatch process**

In clause 3.8.21(j), after "If a *scheduled load*", insert "*scheduled wholesale demand response unit*".

**[72] Clause 3.8.21 On-line dispatch process**

In clause 3.8.21(k), after "A *scheduled load*", insert ", *scheduled wholesale demand response unit*".

**[73] Clause 3.8.22 Rebidding**

In clause 3.8.22(b), after "3.8.3A, 3.8.7A," insert "3.8.7B,".

**[74] Clause 3.8.22 Rebidding**

In clause 3.8.22(b)(1), after "daily *energy constraints*", insert "daily *wholesale demand response constraints*".

**[75] New clause 3.8.22A Offers, bids and rebids must not be false or misleading**

After clause 3.8.22A(a1), insert:

- (a2) For the purposes of paragraph (a), the making of a *dispatch offer* by a *Demand Response Service Provider* in respect of a *scheduled wholesale demand response unit* is deemed to represent to other *Market Participants* through the *pre-dispatch schedules* published by *AEMO* that the *wholesale demand response* the subject of the *dispatch offer* will, if *dispatched*, be the result of *wholesale demand response activity*.

**[76] Clause 3.8.22A Offers, bids and rebids must not be false or misleading**

In clause 3.8.22A(b), after "made by reason of paragraph (a1)" insert "or paragraph (a2)".

**[77] Clause 3.8.23 Failure to conform to dispatch instructions**

In clause 3.8.23(a), after each occurrence of "*scheduled generating unit*", insert "*scheduled wholesale demand response unit*".

**[78] Clause 3.8.23 Failure to conform to dispatch instructions**

In the opening paragraph of clause 3.8.23(c), after "*semi-scheduled generating unit*", insert "*scheduled wholesale demand response unit*".

**[79] Clause 3.8.23 Failure to conform to dispatch instructions**

In clause 3.8.23(c)(1), after "*Semi-Scheduled Generator*," insert "*Demand Response Service Provider*,".

**[80] Clause 3.8.23 Failure to conform to dispatch instructions**

In clause 3.8.23(c)(1), after "the relevant *generating unit*," insert "*scheduled wholesale demand response unit*,".

**[81] Clause 3.8.23 Failure to conform to dispatch instructions**

In clause 3.8.23(c)(2), after "*Scheduled Generator*," insert "*Demand Response Service Provider*,".

**[82] Clause 3.8.23 Failure to conform to dispatch instructions**

Omit "and" at the end of clause 3.8.23(c)(4).

**[83] Clause 3.8.23 Failure to conform to dispatch instructions**

At the end of clause 3.8.23(c)(5), omit "." and insert "; and".

**[84] Clause 3.8.23 Failure to conform to dispatch instructions**

After clause 3.8.23(c)(5), insert:

- (6) should a *Demand Response Service Provider* fail to meet the requests set out in subparagraphs (1) and (2) or if *AEMO* is not satisfied that the *scheduled wholesale demand response unit* will respond to future *dispatch instructions* as required, *AEMO* must notify the *Demand Response Service Provider* that the *scheduled wholesale demand response unit* is not eligible to participate in *central dispatch*.

**[85] Clause 3.8.23 Failure to conform to dispatch instructions**

In clause 3.8.23(d), after "*Semi-Scheduled Generator*," insert "*Demand Response Service Provider*,".

**[86] Clause 3.8.23 Failure to conform to dispatch instructions**

In clause 3.8.23(d), after each occurrence of "*generating unit*", insert "*scheduled wholesale demand response unit*".

**[87] Clause 3.8.23 Failure to conform to dispatch instructions**

In clause 3.8.23(e), after "If a *generating unit*", insert "*scheduled wholesale demand response unit*".

**[88] Clause 3.8.23 Failure to conform to dispatch instructions**

In clause 3.8.23(e), after "*Semi-Scheduled Generator*", insert "*Demand Response Service Provider*".

**[89] Clause 3.8.23 Failure to conform to dispatch instructions**

After clause 3.8.23(f), insert:

- (f1) The direction referred to in paragraph (c)(6) must remain in place until the *Demand Response Service Provider* satisfies AEMO of rectification of the cause of the non-conformance.

**[90] Clause 3.9.1 Principles applicable to spot price determination**

In clause 3.9.1(a)(3), after "*generating unit*", insert ", *scheduled wholesale demand response unit*".

**[91] Clause 3.9.1 Principles applicable to spot price determination**

In clause 3.9.1(a)(3A), after "*generating units*", insert "*scheduled wholesale demand response units*".

**[92] Clause 3.9.1 Principles applicable to spot price determination**

In clause 3.9.1(a)(3A), after "in the case of a *generating unit*", insert ", *scheduled wholesale demand response unit*".



**[93] Clause 3.9.1 Principles applicable to spot price determination**

In clause 3.9.1(a)(6), after "purchases of electricity", insert "(including through the provision of *wholesale demand response*)".

**[94] Clause 3.9.3C Reliability standard**

In clause 3.9.3C(a), after "The *reliability standard* for *generation*", insert ", *wholesale demand response*".

**[95] Clause 3.9.7 Pricing for constrained-on scheduled generating units**

In clause 3.9.7(a), after "causes a *scheduled generating unit*", insert "or a *scheduled wholesale demand response unit*".

**[96] Clause 3.9.7 Pricing for constrained-on scheduled generating units**

In clause 3.9.7(a), after "that *scheduled generating unit*", insert "or *scheduled wholesale demand response unit*".

**[97] Clause 3.9.7 Pricing for constrained-on scheduled generating units**

In clause 3.9.7(b), after "A *Scheduled Generator*", insert "or *Demand Response Service Provider*".

**[98] Rule 3.10 [Deleted]**

Omit rule 3.10 and substitute:

**3.10 Wholesale demand response**

**3.10.1 Wholesale demand response guidelines**

(a) *AEMO* must develop and *publish* and may amend *wholesale demand response guidelines* setting out:

- (1) the requirements for classification of a *load* as a *wholesale demand response unit* in accordance with clause 2.3.6, for establishing a *scheduled wholesale demand response unit* in accordance with clause 2.3.7 and for aggregation in accordance with clause 3.8.3;
- (2) information to be provided to *AEMO* in an application under clause 2.3.6 or clause 2.3.7 including information to demonstrate *baseline compliance* under the nominated *baseline methodology*;

- (3) guidance as to the circumstances in which *AEMO* may waive a classification requirement;
  - (4) any other information or requirements relating to classification of *loads* as *wholesale demand response units* or establishing *scheduled wholesale demand response units* that *AEMO* considers appropriate;
  - (5) *AEMO's* determination under clause 3.10.2 of the *baseline methodology metrics*;
  - (6) *AEMO's* determination under clause 3.10.2 of the process for *baseline compliance testing* and the periods over which that will occur;
  - (7) *AEMO's* determination under clause 3.10.4(d) of the conditions to be satisfied in connection with the submission of a notice for modifying a *baseline*;
  - (8) requirements for the form and content of a *baseline methodology*;
  - (9) a description of any classes of *loads* that in *AEMO's* opinion may reasonably be expected to seek classification as *wholesale demand response unit* and for which *AEMO* proposes to develop *baseline methodologies*;
  - (10) the process and timing for a *Registered Participant* to submit a proposed *baseline methodology* and for *AEMO* to seek clarification or additional information and make a decision;
  - (11) the process for a *Demand Response Service Provider* to apply to *AEMO* to change which *baseline methodology* applies to a *wholesale demand response unit*; and
  - (12) any other information or requirements relating to the testing and approval of *baseline methodologies* that *AEMO* considers appropriate.
- (b) *AEMO* must comply with the *Rules consultation procedures* when making or amending the *wholesale demand response guidelines*.
  - (c) *AEMO* may make minor or administrative changes to the *wholesale demand response guidelines* without complying with the *Rules consultation procedures*.

### **3.10.2 Baseline methodology metrics and baseline compliance testing**

- (a) *AEMO* must determine and may amend the *baseline methodology metrics* setting out the parameters for assessing the *baseline* produced by a *baseline methodology* when applied to a *wholesale demand response unit*.

- (b) The assessment referred to in paragraph (a) must include an assessment of both accuracy and freedom from bias, where:
  - (1) accuracy means the deviation between actual consumption of a *wholesale demand response unit* and its *baseline* for each of the measures of baseline accuracy in paragraph (c); and
  - (2) bias means the deviation between actual consumption of a *wholesale demand response unit* and its *baseline* for each of the measures of baseline accuracy in paragraph (c) consistently exhibiting error:
    - (i) in a single direction (either above or below the *baseline*);  
or
    - (ii) under the same circumstances (for example, during heatwaves).
- (c) The *baseline methodology metrics* must assess accuracy and bias:
  - (1) in particular *trading intervals*; and
  - (2) across multiple *trading intervals* (whether or not contiguous) to test accuracy and bias under a range of conditions or when *demand response* is likely to be *dispatched* or in other circumstances determined by *AEMO*.
- (d) A *wholesale demand response unit* is *baseline compliant* if the *baseline methodology* nominated by the *Demand Response Service Provider* and approved by *AEMO* to apply to the *wholesale demand response unit*, produces a *baseline* that satisfies the *baseline methodology metrics*.
- (e) For the purposes of paragraph (d), *AEMO* must determine and may amend arrangements for the regular and systematic testing, in relation to each *wholesale demand response unit*, of whether the *baseline methodology* when applied to the *wholesale demand response unit* produces a *baseline* that satisfies the *baseline methodology metrics* (**baseline compliance testing**).
- (f) *AEMO* must determine and may amend the periods over which *baseline compliance testing* will occur, which periods may be different for different *wholesale demand response units* or classes of *wholesale demand response unit*.
- (g) In determining the *baseline methodology metrics* and the periods over which *baseline compliance testing* will occur, *AEMO* must have regard to:
  - (1) the need not to distort the operation of the market; and

- (2) the need to maximise the effectiveness of *wholesale demand response* at the least cost to end use consumers of electricity; and
- (3) the level of accuracy achieved by the demand forecasts used by *AEMO* for *pre-dispatch* and the forecasts referred to in clause 3.7B(c)(4).

### **3.10.3 Use of a baseline methodology**

- (a) In determining whether to approve the application of a *baseline methodology* to a *wholesale demand response unit*, *AEMO* must use historic consumption for the *wholesale demand response unit* to assess whether the *baseline methodology metrics* are satisfied.
- (b) A *wholesale demand response unit* is only eligible to provide *wholesale demand response* under these *Rules* if it is *baseline compliant*.
- (c) If *baseline compliance testing* indicates that a *wholesale demand response unit* is not *baseline compliant*, *AEMO* must notify the *Demand Response Service Provider*.
- (d) Where a *wholesale demand response unit* ceases to be *baseline compliant* (including by reason of a change to the *baseline methodology metrics*):
  - (1) the relevant *Demand Response Service Provider* may elect to withdraw the *wholesale demand response unit* from the *scheduled wholesale demand response unit* to which it is allocated on a permanent basis or until it is *baseline compliant*; and
  - (2) *AEMO* may on the application of the *Demand Response Service Provider*, approve the application of another *baseline methodology* that when applied to the *wholesale demand response unit* satisfies the *baseline methodology metrics*.

### **3.10.4 Calculation of baselines**

- (a) Subject to paragraphs (b) and (c), the *baseline* for a *wholesale demand response unit* must be calculated by applying a *baseline methodology*:
  - (1) that is *published* or approved by *AEMO*;
  - (2) that *AEMO* has approved for application to the *wholesale demand response unit*; and
  - (3) that produces a *baseline* for the *wholesale demand response unit* that satisfies the *baseline methodology metrics*.
- (b) Where a *Demand Response Service Provider* is aware of an event or circumstance affecting a *wholesale demand response unit* in one or

more *trading intervals* that is not and could not reasonably have been accounted for in the *baseline methodology* and as a result of which the *baseline* produced by the *baseline methodology* will not satisfy the *baseline methodology metrics*, the *Demand Response Service Provider* may subject to and in accordance with the *wholesale demand response guidelines* and prior to the commencement of the *trading interval* submit to *AEMO* a notice identifying the *wholesale demand response unit* and specifying:

- (1) a factor between (and including) zero and 1 to be applied to the baseline produced by the *baseline methodology*; and
  - (2) the *trading intervals* in which the factor must be applied.
- (c) If a *Demand Response Service Provider* gives a notice in accordance with paragraph (b), for the purposes of *baseline accuracy testing* and settlement, the *baseline* for the *wholesale demand response unit* in each *trading interval* specified in the notice will be the *baseline* as adjusted by the factor specified in the notice.
- (d) *AEMO* must determine and may amend conditions for the submission of notices under paragraph (b) which may include:
- (1) requirements for the submission of notices including timing and content;
  - (2) requirements for information to be provided to *AEMO* or records to be made by the *Demand Response Service Provider* in connection with the notice;
  - (3) events or circumstances that are taken to have been accounted for in the *baseline methodology* and in respect of which no notice may be given;
  - (4) conditions limiting or precluding the submission of notices where reasonably considered necessary by *AEMO* to maintain the accuracy and reliability of *baseline methodologies*; and
  - (5) any other conditions reasonably determined by *AEMO*.

### **3.10.5 Baseline methodology development**

- (a) *AEMO* must in accordance with the *wholesale demand response guidelines* develop *baseline methodologies* applicable to one or more classes of *wholesale demand response units* and must *publish* the *baseline methodologies* developed by it in the register maintained under paragraph (b).
- (b) *AEMO* must establish and maintain a register of *baseline methodologies* developed by *AEMO* or (at the request of the relevant *Registered Participant*) approved by *AEMO* under paragraph (d), together with information to facilitate assessment of a *wholesale*

*demand response unit or prospective wholesale demand response units against the baseline methodology.*

- (c) A *Registered Participant* may in accordance with the *wholesale demand response guidelines* submit to *AEMO* for approval a proposed *baseline methodology*.
- (d) If *AEMO* is reasonably satisfied that a proposed *baseline methodology* satisfies the requirements for approval in the *wholesale demand response guidelines*, *AEMO* must approve the *baseline methodology*.
- (e) If *AEMO* does not approve a proposed *baseline methodology*, *AEMO* must notify the *Registered Participant* who submitted the proposal, providing reasons for the refusal.
- (f) A *baseline methodology* approved under paragraph (d) is *confidential information* of the relevant *Registered Participant* unless the *Registered Participant* requests the *baseline methodology* be included in the register maintained under paragraph (b).
- (g) Notwithstanding paragraph (f), *AEMO* may disclose the *baseline methodology* applicable to a *connection point* for a *wholesale demand response unit* to the *financially responsible Market Participant* for the *connection point* under and in accordance with the *Market Settlement and Transfer Solution Procedures*.

### **3.10.6 Wholesale demand response annual reporting**

- (a) Within six months of the end of each calendar year, *AEMO* must prepare and *publish* a report on the operation of the arrangements for the provision of *wholesale demand response* under the *Rules*.
- (b) A report under paragraph (a) must report on outcomes relating to the use and accuracy of *baseline methodologies* in respect of that year, including:
  - (1) information about *baseline methodologies* available for use under the *wholesale demand response guidelines* and the extent to which the *baseline methodologies* are being used, with an analysis of trends over time;
  - (2) for each *baseline methodology* and type of *wholesale demand response unit*, an assessment against the *baseline methodology metrics* as measured during the *wholesale demand response unit classification process* and *baseline accuracy testing*;
  - (3) any periods for which any *wholesale demand response units* have been ineligible for the provision of *wholesale demand response* due to not being *baseline compliant*;
  - (4) potential improvements to the provision of *wholesale demand response* under the *Rules* which may include:

- (i) changes to *baseline methodology metrics* as a result of the development or approval of new *baseline methodologies*;
  - (ii) the development of new *baseline methodologies*;
  - (iii) any other any measures that may be taken to improve the accuracy or reduce the bias of *baseline methodologies*; and
  - (iv) changes to the *wholesale demand response guidelines* or the *Rules*; and
- (5) the timing and process for making any improvements.
- (c) A report under paragraph (a) must include, for the period under review:
  - (1) the number of registered *Demand Response Service Providers*;
  - (2) the number and capacity of *wholesale demand response units*;
  - (3) the number and average capacity of *scheduled wholesale demand response units*;
  - (4) the amount of *dispatched wholesale demand response* and the frequency of *dispatch*;
  - (5) analysis of the *spot market* price levels at which *wholesale demand response* was *dispatched*;
  - (6) analysis of trends, including year-on-year changes, in the matters referred to in paragraphs (1) to (5).

### **3.10.7 AEMC wholesale demand response review**

- (a) The *AEMC* must, following the third anniversary of the commencement of this clause:
  - (1) conduct a review of the arrangements for the provision of *wholesale demand response* under the *Rules* in accordance with paragraph (b) and the *Rules consultation procedures*; and
  - (2) publish a report of its findings and recommendations.
- (b) The review under paragraph (a) must consider the costs, benefits and effectiveness of the arrangements having regard to:
  - (1) the impact of the arrangements on the *spot price*;
  - (2) the accuracy of *baseline methodologies*;
  - (3) market and technological developments; and
  - (4) any other matters relating to *wholesale demand response* which the *AEMC* considers relevant.

**[99] Clause 3.12.2 Affected Participants and Market Customers entitlements to compensation in relation to AEMO intervention**

In clause 3.12.2(a)(1), after "*scheduled generating unit*", insert "or *scheduled wholesale demand response unit*".

**[100] Clause 3.12.2 Affected Participants and Market Customers entitlements to compensation in relation to AEMO intervention**

In the first paragraph of clause 3.12.2(j)(1), after "*scheduled generating unit*", insert ", *scheduled wholesale demand response unit*".

**[101] Clause 3.12.2 Affected Participants and Market Customers entitlements to compensation in relation to AEMO intervention Title**

In clauses 3.12.2(j)(1)(i), (ii) and (iii), after each occurrence of "*scheduled generating unit*", insert ", *scheduled wholesale demand response unit*".

**[102] Clause 3.12A.1 Restriction offers**

In clause 3.12A.1(b)(1), after each occurrence of "*scheduled generating unit*", insert "or *scheduled wholesale demand response unit*".

**[103] Clause 3.12A.1 Restriction offers**

In clause 3.12A.1(b)(3), after "the relevant *Scheduled Generator*", insert "or *Demand Response Service Provider*".

**[104] Clause 3.12A.1 Restriction offers**

In clause 3.12A.1(b)(8), after "from *Scheduled Generators*", insert ", *Demand Response Service Providers*".

**[105] Clause 3.12A.1 Restriction offers**

In clause 3.12A.1(c)(2), after "*Scheduled Generator*", insert ", *Demand Response Service Provider*".



**[106]** **Clause 3.12A.4 Rebid of capacity under restriction offers**

In clause 3.12A.4, after "each *scheduled generating unit*", insert ", *scheduled wholesale demand response unit*".

**[107]** **Clause 3.12A.5 Dispatch of restriction offers**

In clause 3.12A.5(b), after "*Scheduled Generator*", insert ", *Demand Response Service Provider*".

**[108]** **Clause 3.12A.7 Determination of funding restriction shortfalls**

In clause 3.12A.7(a), after "received by *Scheduled Generators*", insert ", *Demand Response Service Providers*".

**[109]** **Clause 3.13.3 Standing data**

In clause 3.13.3(b), after "*scheduled network services*", insert ", *scheduled wholesale demand response units*".

**[110]** **Clause 3.13.3 Standing data**

In clause 3.13.3(b1), after "*scheduled networks services*", insert ", *scheduled wholesale demand response units*".

**[111]** **Clause 3.13.3 Standing data**

In clause 3.13.3(b1)(ii), omit "or".

**[112]** **Clause 3.13.3 Standing data**

In clause 3.13.3(b1)(iii), omit "." and substitute "; or".

**[113]** **Clause 3.13.3 Standing data**

After clause 3.13.3(b1)(iii), insert:

- (iv) the number of individual *wholesale demand response units* that have been aggregated in accordance with clause 3.8.3.

**[114]** **Clause 3.13.3A Statement of opportunities**

In clause 3.13.3A(a)(8), after "in relation to *generating units*", insert ", *scheduled wholesale demand response units*".

**[115] Clause 3.13.4 Spot market**

In clause 3.13.4(f)(4), after "*generating plant*", insert "*and scheduled wholesale demand response unit*".

**[116] Clause 3.13.4 Spot market**

In clause 3.13.4(f)(5A)(iii), after "*generating plant*", insert "*and scheduled wholesale demand response unit*".

**[117] Clause 3.13.4 Spot market**

In clause 3.13.4(f)(5B)(iii), after "*generating plant*", insert "*and scheduled wholesale demand response unit*".

**[118] Clause 3.13.4 Spot market**

In clause 3.13.4(h), after "*generating unit*", insert "*or scheduled wholesale demand response unit*".

**[119] Clause 3.13.4 Spot market**

In clause 3.13.4(p), after "*generating units*", insert "*, scheduled wholesale demand response units*".

**[120] Clause 3.13.4 Spot market**

In clauses 3.13.4(p)(1), (2) and (6), after each occurrence of "*Semi-Scheduled Generator*", insert "*, Demand Response Service Provider*".

**[121] Clause 3.13.4 Spot market**

In clause 3.13.4(p)(5), after "*generating unit*", insert "*, scheduled wholesale demand response unit*".

**[122] Clause 3.13.4 Spot market**

In clause 3.13.4(q)(1), after "*dispatched generation*", insert "*, dispatched wholesale demand response*".

**[123] Clause 3.13.4 Spot market**

In clause 3.13.4(q)(1), after "*semi-scheduled generating unit*", insert "*, scheduled wholesale demand response unit*".

**[124] Clause 3.13.4 Spot market**

In clause 3.13.4(r)(2), omit "and".

**[125] Clause 3.13.4 Spot market**

In clause 3.13.4(r)(3), omit "." and substitute "; and".

**[126] Clause 3.13.4 Spot market**

After clause 3.13.4(r)(3), insert:

- (4) *actual wholesale demand response* provided by each *scheduled wholesale demand response unit*.

**[127] Clause 3.13.4 Spot market**

In clause 3.13.4(t), after "is less than 30MW", insert "and aggregated information of *actual wholesale demand response* provided by *scheduled wholesale demand response units*".

**[128] Clause 3.14.6 Compensation due to the application of an administered price cap or administered floor price**

In clause 3.14.6(a), in the definition of "**price limit event**", paragraph (1), omit "and" and substitute ",".

**[129] Clause 3.14.6 Compensation due to the application of an administered price cap or administered floor price**

In clause 3.14.6(a), in the definition of "**price limit event**", paragraph (1), after "*Non-Scheduled Generators*", insert "and *Demand Response Service Providers*".

**[130] Clause 3.14.6 Compensation due to the application of an administered price cap or administered floor price**

In clause 3.14.6(b)(1), omit "or" and substitute ",".

**[131]**                                       **Clause 3.14.6**               **Compensation due to the application of an administered price cap or administered floor price**

In clause 3.14.6(b)(1), after "*Non-Scheduled Generator*", insert "*or Demand Response Service Provider*".

**[132]**                                       **Clause 3.14.6**               **Compensation due to the application of an administered price cap or administered floor price**

In clause 3.14.6(c)(1), after "*Non-Scheduled Generators*", insert ", *Demand Response Service Providers*".

**[133]**                                       **Clause 3.14.6**               **Compensation due to the application of an administered price cap or administered floor price**

In clause 3.14.6(c)(1), after "*energy*" insert "(including by means of *wholesale demand response*)".

**[134]**                                       **Clause 3.15.1**               **Settlements management by AEMO**

In clause 3.15.1(a)(3), omit "and".

**[135]**                                       **Clause 3.15.1**               **Settlements management by AEMO**

In clause 3.15.1(a)(4), omit "." and substitute "; and".

**[136]**                                       **Clause 3.15.1**               **Settlements management by AEMO**

After clause 3.15.1(a)(4), insert:

- (5) under clause 3.15.6B.

**[137] Clause 3.15.6A Ancillary service transactions**

In clause 3.15.6A(f)(3), after "for the *Market Generators*", insert ", the *wholesale demand response energy for Demand Response Service Providers*".

**[138] Clause 3.15.6A Ancillary service transactions**

In clause 3.15.6A(f), after paragraph (ii), after "in relation to each *Market Generator*", insert ", each *Demand Response Service Provider*".

**[139] Clause 3.15.6A Ancillary service transactions**

In clause 3.15.6A(f), after "for that *Market Generator*", insert ", that *Demand Response Service Provider*".

**[140] Clause 3.15.6A Ancillary service transactions**

Omit the formula in clause 3.15.6A(f) and substitute:

$$TA = RTCRSP \times \frac{TGE + TSGE + TWDRE}{RATGE + RATS GE + RATWDRE} \times -1$$

**[141] Clause 3.15.6A Ancillary service transactions**

In clause 3.15.6A(f), after the formula, below the explanation "TGE (in MWh)", insert:

TWDR = the *wholesale demand response energy for a Demand Response Service Provider in that region for the trading interval*;

**[142] Clause 3.15.6A Ancillary service transactions**

In clause 3.15.6A(f), after the formula, in the explanation "RATGE (in MWh)", omit "and".

**[143] Clause 3.15.6A Ancillary service transactions**

In clause 3.15.6A(f), after the formula, in the explanation "RATS GE (in MWh)", omit "." and substitute "; and".

**[144] Clause 3.15.6A Ancillary service transactions**

In clause 3.15.6A(f), after the formula, below the explanation "RATSGE (in MWh)", insert:

RATW = the aggregate of the *wholesale demand response energy*  
DRE figures for all *Demand Response Service Providers* in that  
(in region in that *trading interval*.  
MWh)

**[145] Clause 3.15.6A Ancillary service transactions**

In clause 3.15.6A(i)(1), after each occurrence of "*Market Small Generation Aggregator*", insert ", *Demand Response Service Provider*".

**[146] Clause 3.15.6A Ancillary service transactions**

In clause 3.15.6A(i)(1), in the explanation of "MPF (a number)", after "*Market Small Generation Aggregator*", insert ", *Demand Response Service Provider*".

**[147] Clause 3.15.6A Ancillary service transactions**

In clause 3.15.6A(k)(5), after "*a scheduled generating unit*", insert "*scheduled wholesale demand response unit*".

**[148] Clause 3.15.6A Ancillary service transactions**

In clause 3.15.6A(o)(5), omit "and".

**[149] Clause 3.15.6A Ancillary service transactions**

In clause 3.15.6A(o)(6)(B), omit "." and substitute ";".

**[150] Clause 3.15.6A Ancillary service transactions**

After clause 3.15.6A(o)(6), insert:

- (7) '*wholesale demand response energy*' in respect of a *Demand Response Service Provider* for a *trading interval* means the sum of the *wholesale demand response* provided by relevant *scheduled wholesale demand response units* for that *trading*

*interval* in respect of that *Demand Response Service Provider* provided that, if the sum of those figures is negative, then the *Demand Response Service Provider's wholesale demand response energy* for that *trading interval* is zero; and

- (8) a *scheduled wholesale demand response unit* is a relevant *scheduled wholesale demand response unit* of a *Demand Response Service Provider* if it was *dispatched* to provide *wholesale demand response* in the *trading interval*.

**[151]** **New clause 3.15.6B Wholesale demand response transactions**

After clause 3.15.6A, insert:

**3.15.6B Wholesale demand response transactions**

- (a) In each *trading interval*, in relation to a *connection point* for a *dispatched wholesale demand response unit* in the *trading interval*, a wholesale demand response transaction occurs, which results in a *trading amount* for the relevant *Demand Response Service Provider* determined in accordance with the formula:

$$TA = WDRSQ \times (RRP - WDRRR)$$

where:

TA = the *trading amount* to be determined (which will be a positive or negative dollar amount for each *trading interval*);

WDRSQ = the wholesale demand response settlement quantity for the *wholesale demand response load* for that *trading interval*, expressed in MWh and calculated under paragraph (c);

RRP = the *regional reference price* for the *regional reference node* to which the *connection point* is assigned, expressed in dollars per MWh; and

WDRRR = the wholesale demand regional reimbursement rate for the *regional reference node* to which the *connection point* is assigned, expressed in dollars per MWh and determined under paragraph (e).

- (b) In each *trading interval*, in relation to a *connection point* for a *dispatched wholesale demand response unit* in the *trading interval*, a

wholesale demand response transaction occurs, which results in a *trading amount* for the *financially responsible Market Participant* for the *connection point* determined in accordance with the formula:

$$TA = WDRSQ \times (WDRRR - RRP)$$

where:

TA = the *trading amount* to be determined (which will be a positive or negative dollar amount for each *trading interval*);

WDRSQ = the wholesale demand response settlement quantity for the *connection point* for that *trading interval*, expressed in MWh and calculated under paragraph (c);

WDRRR = the wholesale demand regional reimbursement rate for the *regional reference node* to which the *connection point* is assigned, expressed in dollars per MWh and determined under paragraph (e); and

RRP = the *regional reference price* for the *regional reference node* to which the *connection point* is assigned, expressed in dollars per MWh.

- (c) The wholesale demand response settlement quantity for a *connection point* for a *wholesale demand response unit* for a *trading interval* is determined in accordance with the formula:

$$WDRSQ = BSQ + ME$$

where:

WDRSQ = the *wholesale demand response* settlement quantity to be determined;

BSQ = the *baseline* settlement quantity for the *connection point* for the *trading interval*, expressed in MWh and calculated under paragraph (d); and

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



value where the flow is in the other direction).

- (d) The baseline settlement quantity for a *connection point* for a *wholesale demand response unit* for a *trading interval* is the *baseline* for the *wholesale demand response load* for the *trading interval* (as may have been adjusted in accordance with clause 3.10.4(c)).
- (e) The wholesale demand regional reimbursement rate for a *regional reference node* for a *trading interval* is the load weighted average *spot price* for the *regional reference node* determined by the *AER* in accordance with paragraph (f) for the quarter in which the *trading interval* falls.
- (f) The *AER* must calculate and provide to *AEMO* for each quarter commencing on 1 January, 1 April, 1 July and 1 October the load weighted average *spot price* for each *regional reference node* over the 12 month period ending immediately before the start of the quarter.

**[152] Clause 3.20.1 Definitions**

In clause 3.20.1(b), omit "energy only" and substitute "*energy only* (including by means of *wholesale demand response*)".

**[153] Clause 3.20.3 Reserve contracts**

In clause 3.20.3(a)(1), after "*scheduled generating units*", insert "*scheduled wholesale demand response units*".

**[154] Clause 3.20.3 Reserve contracts**

In clause 3.20.3(g), after "capacity of *scheduled generating units*," insert "*scheduled wholesale demand response units*".

**[155] Clause 3.20.6 Reporting on RERT by AEMO**

In clause 3.20.6(g)(2), after "when a *scheduled generating unit*," insert "*scheduled wholesale demand response unit*".

**[156] Clause 3.20.7 AEMO's exercise of the RERT**

In clause 3.20.7(b), after "*dispatching a scheduled generating unit*," insert "*scheduled wholesale demand response unit*".

**[157]                                      Clause 3.20.7                      AEMO's exercise of the  
RERT**

In clause 3.20.7(d), after "*scheduled generating unit*", insert "*scheduled wholesale demand response unit*".

**[158]                                      Clause 3.20.7                      AEMO's exercise of the  
RERT**

In clause 3.20.7(d)(1), after "*scheduled generating unit*", insert "*scheduled wholesale demand response unit*".

**[159]                                      Clause 3.20.7                      AEMO's exercise of the  
RERT**

In clause 3.20.7(d)(2), after "*dispatch of scheduled generating units*", insert "*scheduled wholesale demand response units*".

**[160]                                      Clause 3.20.7                      AEMO's exercise of the  
RERT**

Omit clause 3.20.7(e)(1) and substitute:

- (1) the methodology, information and assumptions that *AEMO* uses to satisfy itself that a person complies with:
  - (i) clause 3.20.3(i) in relation to *generating units* or *loads* that are the subject of *unscheduled reserve contracts*; and
  - (ii) clause 3.20.3(h) in relation to *scheduled wholesale demand response units* that are the subject of *scheduled reserve contracts*;

**[161]                                      Clause 3.20.7                      AEMO's exercise of the  
RERT**

After clause 3.20.7(e)(1), insert:

- (1A) the measures *AEMO* will adopt in order to reduce the possibility that *generating units* or *loads* likely to be *activated* under *unscheduled reserve contracts* are otherwise engaged at the time the *unscheduled reserve contracts* are required to be *activated* by *AEMO*;

**[162]                                      Schedule 3.1                      Bid and Offer Validation  
Data**

In paragraph (b) of schedule 3.1, after "*each of their scheduled loads*", insert "*scheduled wholesale demand response units*".

## **Schedule 4      Amendment to the National Electricity Rules**

(Clause 6)

### **[1] Clause 4.1.1      Purpose**

In clause 4.1.1(a)(3)(iv), after "*semi-scheduled generating units*," insert "*scheduled wholesale demand response units*,".

### **[2] Clause 4.3.1      Responsibility of AEMO for power system security**

In clause 4.3.1(i), after "*semi-scheduled generating units*," insert "*scheduled wholesale demand response units*,".

### **[3] Clause 4.3.1      Responsibility of AEMO for power system security**

In clause 4.3.1(j), after "*generating units*," insert "*scheduled wholesale demand response units*,".

### **[4] Clause 4.3.1      Responsibility of AEMO for power system security**

In clause 4.3.1(l), after "*generation*" insert "*and wholesale demand response*".

### **[5] Clause 4.4.2      Operational frequency control requirements**

In clause 4.4.2(a), after "*semi-scheduled generating units*," insert "*scheduled wholesale demand response units*,".

### **[6] Clause 4.8.4      Declaration of conditions**

In clause 4.8.4(a), after "*generation*" insert "*or wholesale demand response*".

### **[7] Clause 4.8.4B      Lack of reserve framework reporting**

In clause 4.8.4B(b), omit the extra space before the close bracket of "(**lack of reserve framework report**)".

### **[8] Clause 4.8.5      Managing declarations of conditions**

In clause 4.8.5(c)(2), after "*Market Customers*," insert "*Demand Response Service Providers*,".

### **[9] Clause 4.9.1      Load forecasting**

In clause 4.9.1(b), after "*total generation*", insert "*or wholesale demand response*".

### **[10] Clause 4.9.1 Load forecasting**

In clause 4.9.1(b), after "and", insert "in the case of *generation* capacity,".

### **[11] New clause 4.9.2B Instructions to Demand Response Service Providers**

After clause 4.9.2A, insert:

#### **4.9.2B Instructions to Demand Response Service Providers**

- (a) *AEMO* may, at any time, give instructions to *Demand Response Service Providers* to provide *wholesale demand response* consistent with *dispatch offers* made in accordance with Chapter 3 (*dispatch instructions*).
- (b) A *Demand Response Service Provider* must, with respect to *scheduled wholesale demand response units* in relation to which a *dispatch offer* has been submitted for a particular *trading interval*, ensure that appropriate personnel or electronic facilities are available at all relevant times to receive and immediately act upon *dispatch instructions* issued by *AEMO* to the *Demand Response Service Provider*.

### **[12] Clause 4.9.5 Form of dispatch instructions**

After clause 4.9.5(a1), insert:

- (a2) A *dispatch instruction* for a *scheduled wholesale demand response unit* must include the following:
  - (1) specific reference to the *scheduled wholesale demand response unit* to which the *dispatch instruction* applies;
  - (2) the desired *loading level* of the *scheduled wholesale demand response unit* at the end of the *trading interval* to which it relates;
  - (3) the *ramp rate* (if applicable) which is to be followed by the *scheduled wholesale demand response* or a specific target time to reach the outcome specified in the *dispatch instruction*;
  - (4) the time the *dispatch instruction* is issued; and
  - (5) if the time at which the *dispatch instruction* is to take effect is different from the time the *dispatch instruction* is issued, the start time.

### **[13] Clause 4.9.8 General responsibilities of Registered Participants**

After clause 4.9.8(e), insert:

- (f) *A Demand Response Service Provider* must ensure that each of its *scheduled wholesale demand response units* is at all times able to comply with its latest *dispatch offer*.

#### **[14] New clause 4.9.9E Wholesale demand response availability changes**

After clause 4.9.9D, insert:

##### **4.9.9E Wholesale demand response availability changes**

*A Demand Response Service Provider* must, without delay, notify *AEMO* of any event which has changed or is likely to change the availability of any *wholesale demand response*, as soon as the *Demand Response Service Provider* becomes aware of the event.

#### **[15] Clause 4.11.1 Remote control and monitoring devices**

After clause 4.11.1(c), insert:

- (c1) The provider of any *wholesale demand response* 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*.

#### **[16] Clause 4A.E.1 Qualifying contracts**

In clause 4A.E.1(b)(2), omit "of" and substitute "for".

#### **[17] Clause 4A.E.1 Qualifying contracts**

In clause 4A.E.1(c), omit "person curtails" and substitute "person provides demand response (including *wholesale demand response*) by curtailing".

#### **[18] Clause 4A.E.1 Qualifying contracts**

In clause 4A.E.1(c), after "and", insert "(unless it is for the provision of *wholesale demand response* that is subject to *dispatch* by *AEMO*)".

#### **[19] Clause 4A.E.1 Qualifying contracts**

In clause 4A.E.1(e), after "curtailment", insert "or the provision by a liable entity of *wholesale demand response*".

#### **[20] Clause 7.15.5 Access to data**

In clause 7.15.5(f)(3), omit "and".

**[21] Clause 7.15.5 Access to data**

In clause 7.15.5(f)(4), omit "*metering data*," and substitute "*metering data; and*".

**[22] Clause 7.15.5 Access to data**

After clause 7.15.5(f)(4), insert:

- (5) a *Demand Response Service Provider* may access and receive *NMI Standing Data* and *metering data*,

## Schedule 5 Amendment to the National Electricity Rules

(Clause 7)

### [1] Chapter 10 New definitions

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

#### ***baseline***

For a *wholesale demand response unit*:

- (a) when the *wholesale demand response unit* is not being *dispatched* to provide *wholesale demand response*, a forecast of the amount of electrical *energy* flowing at the *connection point* for the *wholesale demand response unit*; and
- (b) when the *wholesale demand response unit* is being *dispatched* to provide *wholesale demand response*, an estimate of what the amount of electrical *energy* flowing at the *connection point* for the *wholesale demand response unit* would have been if the *wholesale demand response unit* had not been *dispatched*,

in each case 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.

#### ***baseline compliance testing***

Testing in accordance with arrangements determined by *AEMO* under clause 3.10.2(e) and described in the *wholesale demand response guidelines* to determine whether a *baseline methodology* when applied to a *wholesale demand response unit* produces a *baseline* that satisfies the *baseline methodology metrics*.

#### ***baseline compliant***

A *wholesale demand response unit* is *baseline compliant* if the *baseline methodology* nominated by the *Demand Response Service Provider* and approved by *AEMO* to apply to the *wholesale demand response unit* produces a *baseline* that satisfies the *baseline methodology metrics*.

#### ***baseline methodology***

A methodology applied to a *wholesale demand response unit* to determine a *baseline* for the *wholesale demand response unit* developed or approved by *AEMO* under clause 3.10.5 and in accordance with the *wholesale demand response guidelines*.

#### ***baseline methodology metrics***

Parameters determined by *AEMO* in accordance with clause 3.10.2(a) for assessing the *baseline* produced by a *baseline methodology* when applied to a *wholesale demand response unit* in accordance with clause 3.10.2.

***Demand Response Service Provider***

A person who offers and provides *load* as either or both:

- (a) *wholesale demand response* in respect of a *scheduled wholesale demand response unit*; and
  - (b) a *market ancillary service* in respect of *ancillary service load*,
- and who is registered by *AEMO* as a *Demand Response Service Provider* under Chapter 2. The relevant person does not need to be the *Market Customer* for the relevant *load*.

***dispatched wholesale demand response unit***

A *wholesale demand response unit* allocated to a *scheduled wholesale demand response unit* which has been *dispatched* as part of *central dispatch*.

***dispatched wholesale demand response***

*Wholesale demand response* which has been *dispatched* as part of *central dispatch*.

***scheduled wholesale demand response unit***

One or more *wholesale demand response units* established as a *scheduled wholesale demand response unit* in accordance with clause 2.3.7.

***wholesale demand response***

An adjustment to the amount of electrical *energy* flowing at the *connection point* for a *wholesale demand response unit* in response to a *dispatch instruction*, where the adjustment is relative to the amount of electrical *energy* flowing at the start of the *trading interval*, or series of contiguous *trading intervals* for which the *wholesale demand response* was *dispatched*.

For a *scheduled wholesale demand response unit*, the net aggregate adjustment across all *wholesale demand response units* allocated to the *scheduled wholesale demand response unit*.

***wholesale demand response activity***

An activity in respect of a *scheduled wholesale demand response unit* that:

- (a) results in the provision of *wholesale demand response* by the *scheduled wholesale demand response unit*;
- (b) is undertaken in order to comply with a *dispatch instruction* to provide *wholesale demand response*;
- (c) will not or would not have been undertaken but for the *dispatch instruction*.



***wholesale demand response constraint***

A limitation on the capability of a *scheduled wholesale demand response unit* to provide *wholesale demand response* at the level that would occur if the limitation were removed.

***wholesale demand response dispatch offer***

A notice submitted by a *Demand Response Service Provider* to *AEMO* relating to the *dispatch* of a *scheduled wholesale demand response unit* in accordance with clause 3.8.7B.

***wholesale demand response guidelines***

Guidelines made by *AEMO* under clause 3.10.1.

***wholesale demand response unit***

A *load* which has been classified in accordance with Chapter 2 as a *wholesale demand response unit*.

**[2] Chapter 10                      Substituted definitions**

In chapter 10, substitute the following definitions:

***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 wholesale demand response units, scheduled network services or scheduled loads* in accordance with a *scheduled reserve contract*; or
  - (2) *activating loads or generating units* under an *unscheduled reserve contract*.

***Ancillary Service Provider***

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

***available capacity***

The total MW capacity available for *dispatch* by a *scheduled generating unit, semi-scheduled generating unit, scheduled wholesale demand response unit* or *scheduled load* (i.e. maximum plant availability) or, in relation to a specified *price band*, the MW capacity within that *price band* available for *dispatch* (i.e. availability at each price band).

***bid and offer validation data***

Data submitted by *Scheduled Generators, Semi-Scheduled Generators* and *Market Participants* to *AEMO* in relation to their *scheduled loads, scheduled generating units, semi-scheduled generating units, scheduled wholesale demand response units* and *scheduled market network services* in accordance with schedule 3.1.

***central dispatch***

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

***constrained off***

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

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

***constrained on***

In respect of a *generating unit*, the state where, due to a *constraint* on a *network* or in order to provide *inertia network services* under an *inertia services agreement* or *system strength services* under a *system strength services agreement*, the output of that *generating unit* is limited above the level to which it would otherwise have been *dispatched* by *AEMO* on the basis of its *dispatch offer*.

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

***constraint, constrained***

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

***Directed Participant***

A *Scheduled Generator, Semi-Scheduled Generator, Market Generator, Demand Response Service Provider* in respect of its *ancillary service load*,

*Scheduled Network Service Provider or Market Customer the subject of a direction.*

***dispatch***

The act of initiating or enabling all or part of the response specified in a *dispatch bid, dispatch offer or market ancillary service offer* in accordance with rule 3.8, or a *direction* or operation of capacity the subject of a *reserve contract* or an instruction under an *ancillary services agreement* or to *enable an inertia network service or system strength service* as appropriate.

***dispatch inflexibility profile***

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

***dispatch instruction***

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

***dispatch offer***

A *generation dispatch offer or a network dispatch offer or a wholesale demand response dispatch offer*.

***dispatch offer price***

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

***dispatchable unit identifier***

An unique reference label allocated by *AEMO* for each *scheduled generating unit, semi-scheduled generating unit, scheduled wholesale demand response unit, scheduled load, and scheduled network service*.

***inflexible, inflexibility***

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

***load shedding***

Reducing or *disconnecting load* from the *power system*, other than by means of *wholesale demand response*.

***loading level***

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

For a *wholesale demand response unit*, the level of *wholesale demand response* (in MW).

***Market Participant***

A person who is registered by *AEMO* as a *Market Generator, Market Customer, Market Small Generation Aggregator, Demand Response Service Provider* or *Market Network Service Provider* under Chapter 2.

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

The procedures from time to time *published* by *AEMO* under clause 7.16.2 which include those governing:

- (a) the recording of financial responsibility for *energy* flows at a *connection point*, the transfer of that responsibility between *Market Participants* and the recording of *energy* flows at a *connection point*:  
and
- (b) the recording of the classification of a *connection point* as a *wholesale demand response unit*, the *Demand Response Service Provider* responsible for the *wholesale demand response unit*, the transfer of that responsibility between *Market Participants* and the *baseline methodology* applicable to the *wholesale demand response unit*.

***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 *scheduled 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.

***plant***

- (a) In relation to a *connection point*, includes all equipment involved in generating, utilising or transmitting electrical *energy*.
- (b) In relation to *dispatch bids* and *offers*, controllable generating equipment, controllable *loads* and *wholesale demand response units*.
- (c) In relation to the *statement of opportunities* prepared by *AEMO*, individually controllable generating facilities registered or capable of being registered with *AEMO*.

- (d) In relation to the *regulatory investment test for transmission*, any of the definitions of *plant* in paragraphs (a) to (c) relevant to the application of the *regulatory investment test for transmission* to a RIT-T project.
- (e) In relation to the *regulatory investment test for distribution*, any of the definitions of *plant* in paragraphs (a) to (c) relevant to the application of the *regulatory investment test for distribution* to a RIT-D project.
- (f) In relation to a *system strength remediation scheme*, includes all equipment involved in the implementation of the scheme.

#### ***scheduled plant***

In respect of a *Registered Participant*, a *scheduled generating unit*, a *semi-scheduled generating unit*, a *scheduled wholesale demand response unit*, a *scheduled network service* or a *scheduled load* classified by or in respect to that *Registered Participant* in accordance with Chapter 2.

#### ***scheduled reserve***

The amount of surplus or unused capacity:

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

#### ***unscheduled reserve***

The amount of surplus or unused capacity:

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

### **[3] Chapter 10 Omitted definitions**

Omit the definition of "*Market Ancillary Service Provider*".

### **[4] Chapter 10 Definition of Affected Participant**

In the definition of *Affected Participant*, omit paragraph (b) and substitute:

- (b) In relation to the exercise of the *RERT* under rule 3.20:
  - (1) a *Scheduled Generator*, *Demand Response Service Provider* or *Scheduled Network Service Provider*:
    - (i) whose *plant* or *scheduled network service* was not *dispatched* under a *scheduled reserve contract*, that had

its *dispatched* quantity affected by the *dispatch* of *plant* or *scheduled network service* under that *scheduled reserve contract*; and

- (ii) who was not the subject of *activation* under an *unscheduled reserve contract*, that had its *dispatched* quantity affected by the *activation* of *generating units* or *loads* under that *unscheduled reserve contract*;
- (2) a *Scheduled Generator, Demand Response Service Provider* or *Scheduled Network Service Provider* whose *plant* or *scheduled network service* was *dispatched* under a *scheduled reserve contract*, that had its *dispatched* quantity for other *generating units*, other *scheduled wholesale demand response units* or other services which were not *dispatched* under the *scheduled reserve contract* affected by that *dispatch* of *plant* or *scheduled network service* under that *scheduled reserve contract*, however, the *Scheduled Generator, Demand Response Service Provider* or *Scheduled Network Service Provider* is only an *Affected Participant* in respect of those *generating units, scheduled wholesale demand response units* and services which were not *dispatched* under that *scheduled reserve contract*; or
- (3) 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 *plant* or *scheduled network service* under a *scheduled reserve contract* or the *activation* of *generating units, scheduled wholesale demand response units* or *loads* under an *unscheduled reserve contract*.

## **Schedule 6 Savings and Transitional Amendment to the National Electricity Rules**

(Clause 8)

### **[1] New Part ZZZ[T] Wholesale demand response**

In Chapter 11, after Part ZZZS, insert:

#### **Part ZZZ[T] Wholesale demand response**

#### **11.[118] Rules consequential on the making of the National Electricity Amendment (Wholesale demand response mechanism) Rule 2019**

##### **11.[118].1 Definitions**

(a) In this rule 11.[118]:

**Amending Rule** means the National Electricity Amendment (Wholesale demand response mechanism) Rule 2019.

**commencement date** means the date of commencement of Schedule 6 of the Amending Rule.

**Contracts and Firmness Guidelines** has the meaning in Chapter 4A.

**effective date** means the date of commencement of Schedules 1, 3, 4 and 5 of the Amending Rule.

**new Chapter 2** means Chapter 2 as in force immediately after the effective date.

**new Chapter 10** means Chapter 10 as in force immediately after the effective date.

**new clause 2.3.6** means clause 2.3.6 as in force immediately after the effective date.

**new clause 2.3.7** means clause 2.3.7 as in force immediately after the effective date.

**new clause 3.8.3** means clause 3.8.3 as in force immediately after the effective date.

**new clause 3.8.3(a2)** means clause 3.8.3(a2) as in force immediately after the effective date.

**new clause 3.8.2A(a)** means clause 3.8.2A(a) as in force immediately after the effective date.

**new clause 3.8.2A(b)** means clause 3.8.2A(b) as in force immediately after the effective date.

**new clause 3.10.1** means clause 3.10.1 as in force immediately after the effective date.

**new clause 3.10.2** means clause 3.10.2 as in force immediately after the effective date.

**new clause 3.10.5(a)** means clause 3.10.5(a) as in force immediately after the effective date.

**new clause 3.10.5(b)** means clause 3.10.5(b) as in force immediately after the effective date.

**new clause 3.10.5(c)** means clause 3.10.5(c) as in force immediately after the effective date.

**new clause 3.10.6(d)** means clause 3.10.6(d) as in force immediately after the effective date.

**new rule 3.10** means clause 3.10 as in force immediately after the effective date.

- (b) Italicised terms used in this rule 11.[118] have the same meaning as in new Chapter 10.

#### **11.[118].2 Wholesale demand response guidelines**

- (a) No later than 6 months before the effective date, *AEMO* must make and *publish* the *wholesale demand response guidelines* in accordance with new rule 3.10 including its determination of the *baseline methodology metrics* and the periods over which *baseline compliance testing* will occur under new clause 3.10.2.
- (b) *AEMO* must comply with the *Rules consultation procedure* when making the *wholesale demand response guidelines* under paragraph (a).
- (c) The *wholesale demand response guidelines* made under paragraph (a) must come into effect no later than 6 months before the effective date so as to enable the following to be made before the effective date:
- (1) applications for classification of *loads* as *wholesale demand response units* under new clause 2.3.6;
  - (2) applications to establish *scheduled wholesale demand response units* under new clause 2.3.7;
  - (3) applications for aggregation of *wholesale demand response units* under new clause 3.8.3(a2); and
  - (4) applications for approval of *baseline methodologies* under new clause 3.10.5(c).
- (d) If an application referred to in paragraph (c) is made after the *wholesale demand response guidelines* are made under paragraph (a)



and before the effective date, *AEMO* must assess the application in accordance with the applicable provisions in new clause 2.3.6, new clause 2.3.7, new clause 3.8.3 or new rule 3.10 (as applicable) and the *wholesale demand response guidelines* made under paragraph (a).

### **11.[118].3 Baseline methodologies**

- (a) No later than 6 months before the effective date, *AEMO* must establish the register of *baseline methodologies* under new clause 3.10.5(b).
- (b) No later than 6 months before the effective date, *AEMO* must develop *baseline methodologies* in accordance with new clause 3.10.5(a) and publish them in the register established under new clause 3.10.5(b).

### **11.[118].4 Wholesale demand response monitoring guidelines**

- (a) By the effective date, the *AER* must in accordance with the *Rules consultation procedures* make and *publish* the guidelines under new clause 3.10.6(d) with respect to compliance by *Demand Response Service Providers* with new clauses 3.8.2A(b) and (c).
- (b) The guidelines made under paragraph (a) must come into effect on and from the effective date.

### **11.[118].5 Amendments to AEMO and AER documents**

- (a) By the effective date, *AEMO* must review and where necessary amend and *publish* the following documents to take into account the Amending Rule:
  - (1) the *spot market* operations timetable in accordance with clause 3.4.3;
  - (2) the *PoLR cost procedures* made by *AEMO* under clause 3.15.9A(1);
  - (3) the *RERT procedures*;
  - (4) the *Market Settlement and Transfer Solution Procedures*; and
  - (5) the other documents mentioned in clause 11.103.2(a).
- (b) By the effective date, the *AER* must review and where necessary amend and *publish* the following documents to take into account the Amending Rule:
  - (1) the guidelines maintained under clause 3.8.22 in respect of *rebidding*; and
  - (2) the *Contracts and Firmness Guidelines*.
- (c) Amendments made in accordance with paragraph (a) or (b) must take effect on and from the effective date.

**11.[118].6 Amendments to the demand side participation information guidelines**

- (a) By 31 December 2020, *AEMO* must review and where necessary amend and *publish* the demand side participation information guidelines made under rule 3.7D(e) to take into account the Amending Rule.
- (b) The amendments made in accordance with paragraph (a) must take effect on and from 31 March 2021.

**11.[118].7 Amendment to RERT guidelines**

- (a) With effect on and from the effective date, the *RERT guidelines* are amended as set out below:

In the explanatory note at the end of section 2 of the *RERT guidelines*, insert "(including by means of *wholesale demand response*)" after "*energy only*".

- (b) By the effective date, the *Reliability Panel* must make and *publish* the *RERT guidelines* in the form amended by paragraph (a).
- (c) For the purposes of paragraph (b), the *Reliability Panel* is not required to make and *publish* the *RERT guidelines* in accordance with the *Rules consultation procedures*.

**11.[118].8 Renaming of Market Ancillary Service Providers**

- (a) A person who immediately before the effective date is registered with *AEMO* as a *Market Ancillary Service Provider* in respect of an *ancillary service load* is taken to be registered with *AEMO* as a *Demand Response Service Provider* in respect of that *ancillary service load* with effect on and from the effective date.
- (b) A *load* classified as an *ancillary service load* immediately before the effective date continues to be classified as an *ancillary service load* on and from the effective date.
- (c) To avoid doubt, registrations and classifications referred to in paragraphs (a) and (b) are, on and from the effective date, subject to new Chapter 2 as if they had been made under new Chapter 2.