

# **RERT Panel Agreement**

Australian Energy Market Operator Limited

and

[name]

Australian Energy Market Operator Limited Level 22, 530 Collins Street MELBOURNE VIC 3000 TEL: 03 9609 8000

# **RERT Panel Agreement**Contents

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## **RERT Panel Agreement**

## Details

Parties			
AEMO	Name	AUSTRALIAN ENERGY MARKET OPERATOR LIMITED	
	ABN	94 072 010 327	
	Address	Level 22, 530 Collins Street, Melbourne, Victoria	
	Telephor	ne (03) 9609 8000	
	Email	rert@aemo.com.au	
	Attention	[insert]	
Reserve Provider Name			
	ABN		
	Address		
Telephone		ne	
	Email		
	Attention		
Recitals	Α	AEMO is responsible for managing the National Electricity Market in accordance with the Rules.	
		AEMO has selected the Reserve Provider to be a member of a Panel from whom AEMO may seek tenders for the provision of short notice reserve from time to time.	
	C This Agreement sets out the terms and conditions for a being a panel member and provides a framework for the parties to enter into reserve contracts for the provision of reserve from time to time.		
Governing law	New South Wales		
Date of Agreement	See signing page		

## **Operative Provisions**

## 1 Interpretation and Incorporation of Schedules

#### 1.1 Definitions

Unless a contrary intention appears, these meanings apply in this document:

"authority" means any Commonwealth, State, Territory or local government or regulatory department, body, instrumentality, minister, agency or other authority, but does not include AEMO.

"available" means, in respect of each reserve at any time, that the reserve is, or under this Agreement is taken to be, capable of being provided by the Reserve Provider at all of the contracted levels of performance.

"billing period" means a period of 7 days commencing with the trading interval ending at 00:30 hours (Eastern Standard Time) on Sunday, provided that:

- (a) the first billing period commences when this Agreement commences; and
- (b) the last billing period ends when this Agreement ends.

"charges" means the usage charge or pre-activation charge, as applicable.

"claims" means all claims, losses, liabilities, costs or expenses, whether arising in contract, tort (including negligence), equity or otherwise.

"commencement date" means the date this Agreement comes into effect under clause 4.1.

"communication" means any notice, demand, approval, consent, request or other communication required or given by a party to another party under this Agreement or a reserve contract.

"Confirmation" for a particular reserve contract, means the confirmation notice for the provision of a particular reserve for an agreed period given by AEMO to the Reserve Provider substantially in the form contained in **Attachment 1** or such other form as AEMO requires.

"contracted levels of performance" are specified in Item 6 of each Schedule.

"Corporations Act" means the Corporations Act 2001 (Cth).

"datastream" means a stream of metering data associated with a connection point as represented by a NMI. A NMI can have multiple datastreams (e.g. from one or more meters, or from one or more channels or registers that comprise a single meter).

"datastream suffix" means the unique suffix which identifies a datastream and which is associated with the NMI to which it belongs.

"dispose" means assign, transfer or otherwise dispose of any legal or equitable estate, whether by sale, lease, declaration or creation of trust or otherwise.

"EST" means Eastern Standard Time.

"event of force majeure" means in respect of a party (in this definition called the "affected party") an act of God, lightning strike, earthquake, flood, drought, storm, tempest, mudslide, explosion, fire or any other natural disaster, an act of war, act of public enemies or terrorists, riot, civil commotion, malicious damage, sabotage, blockade or revolution, an act or omission of any authority, or a labour dispute, that:

- (a) is beyond the reasonable control of the affected party;
- (b) is not the result of a breach of this Agreement, a reserve contract, legislation or the Rules by the affected party, or of an intentional or negligent act or omission of the

- affected party (or of any other person over which the affected party should have exercised control); and
- (c) results in the *affected party*'s being unable to observe or perform on time and as required any obligation (other than an obligation to pay money) under this Agreement or a *reserve contract*.

For the avoidance of doubt, the inability of a *generating unit* comprising the *reserve* equipment to supply electricity to the *regional reference node* in the *region* where the *reserve* is or may be required due to a *constraint* on a *network* is not an *event* of *force majeure*.

"first stage dispute resolution processes" means the procedures set out in Rule 8.2.4.

"GST" has the meaning given to it in the A New Tax System (Goods and Services Tax) Act 1999 (Cth).

"insolvency event" means, in relation to a party, the happening of any of these events:

- (a) it is (or states that it is) insolvent or under administration; or
- (b) it has a controller (as defined in the *Corporations Act*) appointed, is in liquidation, in provisional liquidation, under administration or wound up or has had a receiver (or receiver and manager) appointed to any part of its property;
- it is subject to any arrangement, assignment, moratorium or composition, protected from creditors under any statute or dissolved (in each case, other than to carry out a reconstruction or amalgamation while solvent on terms approved by the other party);
- (d) an application or order has been made (and, in the case of an application, it is not stayed, withdrawn or dismissed within 30 days), resolution passed, proposal put forward, or any other action taken, in each case in connection with that party, which is preparatory to or could result in any of the events detailed in paragraphs (a), (b) or (c);
- (e) it is otherwise unable to pay its debts when they fall due; or
- (f) something having a substantially similar effect to the events detailed in **paragraphs**(a) to (e) happens in connection with that party under the law of any jurisdiction.

"labour dispute" means a strike, lockout, ban, "go-slow" activity, stoppage, restraint of labour or other similar act that is not directed primarily at a party to this Agreement.

"legislation" means Acts of Parliament, regulations, statutory instruments and codes, and includes any licence, order, official policy, directive, request, requirement or guideline of an authority whether or not it has the force of law.

"minimum technical requirements" are specified in item 6.1 of each Schedule.

"Panel" means the panel to provide short notice reserve (as the case may be) to which the Reserve Provider has been appointed by AEMO.

"pre-activation charge" is specified in **Item 9** of a **Schedule** providing for unscheduled reserve.

"representative", in relation to a party, means any officer, employee, agent, adviser, trustee, permitted assignee, liquidator, administrator, or third party contractor of that party or of a related body corporate (as that term is defined in the *Corporations Act*) of that party.

"Request for Tender" means a request by AEMO to the Reserve Provider for reserve substantially in the form contained in **Attachment 2** or such other form as AEMO requires.

"reserve" is described in **item 3** of each **Schedule** as amended in accordance with this Agreement or a reserve contract.

"reserve contract" means, in respect of a particular reserve, the contract governing the provision of that reserve created in accordance with clause 3.2.

"reserve equipment" means any equipment specified in **Item 4** of each **Schedule** (other than those Schedules providing for reserve through the reduction of *load*) and, in respect of reserve through the reduction of *load*, any equipment used to provide the reserve including any standby generating unit.

"Reserve Provider" is specified in the **Details**.

"Rules" means the National Electricity Rules.

"short notice reserve" means the provision of reserve in response to a 'short-notice situation', as that term is described in the RERT guidelines and the provision of reserve in response to situations where AEMO has less than three hours notice of a projected shortfall in reserves.

"second stage dispute resolution processes" means the procedures set out in Rule 8.2.5.

"term" means the period during which this Agreement is in effect.

"usage charges" are specified in item 9 of each Schedule.

"Web Portal" means the Reserve Trading (RERT) web portal accessable through AEMO market systems established by AEMO to allow reserve providers to confirm available reserve and provide NMI information and other functions.

All terms in italics not defined in this Agreement have the meaning given to that term in the *Rules*.

#### 1.2 Interpretation

Unless a contrary intention appears in this document, a reference to:

- (a) this Agreement includes any schedules and annexures:
- (b) a document (including this Agreement) includes the document as novated, varied, or replaced, and despite any change in the identity of the parties;
- (c) a clause, paragraph, schedule, or annexure is a reference to a clause, paragraph, schedule, or annexure to this Agreement;
- (d) a clause is a reference to all its subclauses;
- (e) an "Item" is a reference to a provision in a **Schedule**;
- (f) legislation includes subordinate legislation and other instruments under them, and consolidations, amendments, re-enactments or replacements of any of them;
- (g) the word "**Rule**" followed by a number refers to provisions in the *Rules*;
- (h) the singular includes the plural and vice versa and a gender includes all genders;
- the word "person" includes a firm, a body corporate, a partnership, joint venture, trust, an unincorporated association and any authority and any successor entity to those persons;
- (j) the word "includes" or "including" or "such as" are not words of limitation, and when introducing an example, do not limit the meaning of the words to which the example relates to examples of a similar kind;
- (k) a person includes a reference to the person's executors, administrators, successors, substitutes (including persons taking by novation) and assigns;
- (l) a party includes, where the context requires it, that person's directors, officers, employees, contractors, agents and any other persons authorised by that party;
- (m) an agreement, representation or warranty:
  - (i) in favour of two or more persons is for the benefit of them jointly and each of them severally;
  - (ii) by two or more persons binds them jointly and each of them severally;

- a thing (including an amount) is a reference to the whole and each part of it and a reference to a group of persons is a reference to all of them collectively, to any two or more of them collectively, and to each of them individually;
- (o) writing includes any mode of representing or reproducing words in tangible and permanently visible form;
- (p) a month is a reference to a calendar month;
- (q) a day is a reference to a period of time commencing at midnight and ending the following midnight; and
- (r) a period of time and the period dates from a given day or the day of an act or event, it is to be calculated exclusive of that day and, if a period of time is specified as commencing on a given day or the day of an act or event, it is to be calculated inclusive of that day.

#### 1.3 Construction

- (a) Headings are inserted for convenience and do not affect the interpretation of this Agreement.
- (b) If a word or phrase is defined in this Agreement, other parts of speech and grammatical forms of that word or phrase have corresponding meanings.
- (c) No rule of construction will apply to a clause to the disadvantage of a party merely because that party put forward the clause or would otherwise benefit from it.

#### 1.4 Symbols

A symbol in column 1 of the table below has the meaning set out opposite that symbol in column 2:

1	2
SYMBOL	MEANING
MW	Megawatt
MWh	Megawatt hour
\$	Australian dollars

#### 1.5 Schedules

If a **Schedule** contains any provisions that impose additional obligations to those set out in the **Operative Provisions**, the provisions in the **Schedule** apply in respect of the *reserve* the subject of that **Schedule**, as if the provision was an **Operative Provision**.

#### 1.6 Priority

To the extent of any inconsistency:

- (a) a **Schedule** prevails over the **Operative Provisions**; and
- (b) for a reserve contract, the Confirmation prevails over this Agreement.

#### 1.7 Rules prevail

If, and to the extent of, any inconsistency between an obligation of *AEMO* under this Agreement and an obligation of *AEMO* under the *Rules*, the obligation of *AEMO* under the *Rules* will prevail over the obligation of *AEMO* under this Agreement.

#### 2 Not used

## 3 Panel membership

#### 3.1 Appointment and Acceptance

AEMO appoints the Reserve Provider as a member of the Panel for provision of short notice reserve in accordance with this Agreement and the Reserve Provider accepts that appointment.

#### 3.2 Creation of reserve contracts

- (a) From time to time, AEMO may issue a Request for Tender to the Reserve Provider to provide short notice reserve for specified periods.
- (b) Subject to clause **5.5** or **Item 2.2**, on receipt of a *Request for Tender*, the *Reserve Provider* must use reasonable endeavours to make an offer to provide *reserve* in response to a *Request for Tender*.
- (c) Any offer under **clause 3.2(b)** must be substantially in the form contained in **Attachment 3** to the relevant **Schedule**, or such other form as *AEMO* requires.
- (d) The parties agree that if AEMO accepts an offer by the Reserve Provider to provide reserve in response to a Request for Tender by sending the Reserve Provider a Confirmation, a separate reserve contract is formed for that reserve comprising clauses 1 to 16 of this Agreement, the relevant Schedule and the terms of the Confirmation.

#### 3.3 No Obligation to Procure from Panel Members

The Reserve Provider acknowledges that:

- (a) AEMO is not required by anything in this Agreement, any legislation, or requirement of any government authority to procure any reserve from the Reserve Provider, or any other member of the Panel; and
- (b) this Agreement is not exclusive and *AEMO* may procure *reserve* from persons who are not members of the *Panel*.

#### 4 Term

#### 4.1 Term of this Agreement

- (a) This Agreement comes into effect at the time when the last party to execute this Agreement does so.
- (b) Subject to earlier termination in accordance with this Agreement, this Agreement continues until midnight at the end of the day that is 12 months after the commencement date.

#### 4.2 Period of Reserve Contracts

- (a) A reserve contract comes into effect on the date specified in the Confirmation.
- (b) A *reserve contract* continues until the date specified in the *Confirmation*, unless it is terminated earlier in accordance with this Agreement.

#### 5 Provision of Reserve

#### 5.1 Obligation to comply with contracted levels of performance

The Reserve Provider must ensure that the reserve is available and provided at the relevant contracted levels of performance and with due care and skill.

#### 5.2 Reserve Provider Undertakings

- (a) Except in accordance with this Agreement, the *Reserve Provider* undertakes that the *reserve* to be provided to *AEMO* under this Agreement will not be:
  - (i) offered to the *market* through any means;
  - (ii) provided or available to be provided pursuant to any other arrangement or agreement, including any demand side management arrangement or agreement.

during the period for which reserve is contracted under a reserve contract.

#### 5.3 Requests for Reserve

- (a) During the period for which *reserve* is contracted under a *reserve contract*, *AEMO* may (but is not obliged to) request the *reserve* be provided by the *Reserve Provider* in accordance with **item 8** of the relevant **Schedule**.
- (b) The Reserve Provider must comply with a request under paragraph (a).

#### 5.4 Unavailability of Reserve

If, at any time (whether during the currency of a reserve contract or otherwise), the Reserve Provider considers that reserve equipment is, or will become, incapable of providing reserve in accordance with the contracted levels of performance, it must notify AEMO immediately specifying:

- (a) which reserve the notice applies to;
- (b) when the *reserve equipment* became, or will become, incapable of providing the *reserve*;
- (c) how long the Reserve Provider expects the incapability to continue; and
- (d) the cause of the incapability.

#### 5.5 Spot Market Transactions

Neither the *Reserve Provider*, nor any other party, will be entitled to *spot market* revenue associated with the provision of *reserve*. If requested by *AEMO*, the *Reserve Provider* will participate in the *spot market* as *AEMO*'s agent and account to *AEMO* for any *spot market* revenue associated with the *reserve*, or *AEMO* may set off that *spot market* revenue against an amount due to the *Reserve Provider* under a *reserve contract*.

#### 5.6 Third party reserve

- (a) The Reserve Provider must obtain written confirmation from each third party and end user contracted by the Reserve Provider to provide load reduction or generation increase for the purpose of the Reserve Provider providing reserve confirming that the load reduction or generation increase is not and will not be:
  - (i) offered to the *market* through any other means;
  - (ii) provided or available to be provided pursuant to any other arrangement or agreement, including any demand side management arrangement or agreement,

during the period for which reserve is contracted under a reserve contract.

(b) In respect of reserve through the reduction of load, every 3 months (or earlier on AEMO's request) from the commencement date the Reserve Provider must provide to AEMO an updated list of NMI's and datastreams to be used to provide reserve in accordance with this Agreement.

### 6 Measurement and verification

#### 6.1 Measurement

Measurement of each *reserve* provided under a *reserve* contract must be made in accordance with the **Schedule** relevant to each *reserve*, and as provided by *AEMO*'s records and the *Reserve Provider*'s *metering*, measurement, supervisory and electronic data processing systems.

#### 6.2 Verification

AEMO may verify that *reserve* is being provided in accordance with a *reserve contract* using the process contemplated by a relevant **Schedule**.

## 7 Records, audits and inspections

#### 7.1 Type of Records

The Reserve Provider must compile and maintain records concerning this Agreement, including the provision of reserve under a reserve contract, the operation and maintenance of reserve equipment, any procedures used in the performance of this Agreement or a reserve contract and all notices given or received by telephone in relation to this Agreement or a reserve contract and, in respect of reserve through the reduction of load, records of electricity supply and demand side management agreements or arrangements or any network support agreements or arrangements affecting the reserve including the time, duration, quantity and amount of demand response or other services supplied or activated under any such agreement or arrangement.

#### 7.2 Form and Retention

- (a) The records referred to in **clause 7.1** may be maintained in writing or electronically.
- (b) The *Reserve Provider* must maintain a record referred to in **clause 7.1** for at least 7 years from the date it was created.

#### 7.3 Right to Inspect Records

- (a) AEMO may request a copy of any of the records maintained under **clause 7.1** or any other information in connection with *reserve* at any time.
- (b) The Reserve Provider must comply with a request from AEMO under paragraph (a) within 5 business days of receipt.

#### 7.4 Audits by AEMO

- (a) AEMO may audit any of the records maintained under **clause 7.1** by giving the Reserve Provider at least 5 business days' notice. A notice under this **paragraph** (a) must include the following information:
  - (i) the nature of the audit;
  - (ii) the reserve concerned;
  - (iii) the name of any *representative* appointed by *AEMO* to conduct the audit; and

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- (iv) the date on which the audit will commence.
- (b) Unless the *Reserve Provider* agrees otherwise, an audit under this **clause 7.4** may only occur during normal business hours on a *business day*.
- (c) On request from AEMO, the Reserve Provider must procure the disclosure of records and information from any party to an electricity supply and demand side management agreements or arrangements or any network support agreements or arrangements affecting the reserve including the time, duration, quantity and amount of demand response or other services supplied or activated under any such

agreement or arrangement and the *Reserve Provider* consents to the disclosure to *AEMO* of any such records and information.

#### 7.5 Conduct of Audit

Audits will occur at the site at which the relevant records are maintained by the *Reserve Provider* and the *Reserve Provider* must provide the *representatives* conducting the audit with all assistance those *representatives* may require to conduct it, including access to all relevant records (including computer records or systems) and any interpretation or explanation required.

#### 7.6 Inspections

- (a) At a date and time convenient to both parties, *AEMO* may inspect any of the *reserve* equipment to determine whether the *Reserve Provider* is complying with this Agreement or a *reserve contract*.
- (b) Where any reserve equipment is located on a third party or end user's property, the Reserve Provider will use all commercially reasonable endeavours to procure consent for AEMO to inspect such equipment at a date and time convenient to both parties and the end user, such that AEMO may inspect any of the reserve equipment to determine whether the Reserve Provider is complying with this Agreement or a reserve contract.
- (c) At least 5 business days prior to the date on which AEMO wishes to make an inspection, AEMO must deliver a notice to the Reserve Provider detailing the following information:
  - (i) the reserve equipment to be inspected;
  - (ii) the *representatives* who will be conducting the inspection on behalf of *AEMO*; and
  - (iii) the date and time when AEMO proposes to commence the inspection and the expected date and time when the inspection will conclude.
- (d) The Reserve Provider must not unreasonably refuse access and must procure that all necessary third party consents to the access required by AEMO to conduct the inspection are secured in time for the inspection to commence as agreed between the parties.
- (e) If AEMO conducts an inspection under this **clause 7.6**, the Reserve Provider must designate representatives to accompany AEMO's representatives and answer any questions and assist with the conduct of the inspection.

#### 7.7 Conduct of Inspection

- (a) AEMO must not carry out any inspection of reserve equipment under clause 7.6 within 6 months of a previous inspection under this Agreement of the same reserve equipment.
- (b) Unless otherwise agreed by the Reserve Provider, an inspection under clause 7.6 may take as long as reasonably necessary, provided it is no longer than 24 hours. Any agreement to extend the period of the inspection must not be unreasonably withheld, considering the extent of the inspection proposed.
- (c) Whilst carrying out an inspection in accordance with **clause 7.6**, *AEMO* must, and must procure that its *representatives*:
  - (i) not cause any loss or damage to the Reserve Provider's assets;
  - (ii) not interfere with the operation of the *Reserve Provider's* business (provided that the inspection itself does not constitute interference);

- (iii) observe the Reserve Provider's requirements relating to occupational health and safety and industrial relations matters that apply to all invitees of the Reserve Provider; and
- (iv) not ask any question or give any direction, instruction, or advice to any representative of the Reserve Provider other than the representative designated by the Reserve Provider for this purpose.

## 8 Maintenance & Repairs

#### 8.1 Maintenance of Reserve Equipment

- (a) In respect of reserve equipment owned, operated or controlled by the Reserve Provider, the Reserve Provider must maintain the reserve equipment in accordance with good electricity industry practice.
- (b) In respect of *reserve equipment* not owned, operated or controlled by the *Reserve Provider*, the *Reserve Provider* must:
  - (i) ensure that each each third party and end user contracted by the *Reserve Provider* for the purposes of providing *reserve* maintains the reserve equipment applicable to that third party and end user in accordance with *good electricity industry practice*; and
  - (ii) notify AEMO promptly after becoming aware of a change or modification to any reserve equipment in a way that affects or could reasonably be expected to affect the ability of that reserve equipment to meet the contracted levels of performance

#### 8.2 Notice of Modifications to Reserve Equipment

- (a) In respect of reserve equipment owned, operated or controlled by the Reserve Provider, the Reserve Provider must notify AEMO promptly after changing or modifying any reserve equipment in a way that affects or could reasonably be expected to affect the ability of that reserve equipment to meet the contracted levels of performance.
- (b) In respect of reserve equipment not owned, operated or controlled by the Reserve Provider, the Reserve Provider must ensure that each third party and end user contracted by the Reserve Provider for the purposes of providing reserve notifies the Reserve Provider as soon as the reserve equipment applicable to that third party and end user is, or will become, incapable of providing reserve in accordance with the contracted levels of performance.

#### 8.3 Ad Hoc Maintenance & Repairs

- (a) If any maintenance or repair to the *reserve equipment* is required after entering into a *reserve contract* that could affect the provision of the *reserve* in accordance with that *reserve contract*, the *Reserve Provider* must notify *AEMO* of the need for that maintenance or repair as soon as possible before any maintenance or repair occurs. The notice must include the following information:
  - (A) the reason for the maintenance or repair;
  - (B) the proposed date and time of the maintenance or repair;
  - (C) the expected impact of the maintenance or repair on the *reserve* during the maintenance or repair period; and
  - (D) the Reserve Provider's assessment of the urgency of the maintenance or repair.
- (b) The Reserve Provider must not commence the proposed maintenance or repair unless AEMO agrees that the maintenance or repair take place as proposed.

- (c) Despite agreeing to the maintenance or repair, AEMO may at any time request the Reserve Provider to defer it if AEMO considers it is likely that the reserve will need to be activated at or about the time of the proposed maintenance or repair. If requested by AEMO, the Reserve Provider must make a good faith assessment of the risks associated with the deferral of the relevant maintenance or repair in relation to the ability of the reserve to meet the contracted levels of performance and notify AEMO of that assessment as soon as possible.
- (d) The Reserve Provider must comply with a request by AEMO to defer the maintenance or repair, unless, in the Reserve Provider's reasonable opinion, damage to the reserve equipment is imminent, or the deferral of the maintenance or repair significantly increases the risk of imminent danger to the safety of personnel.
- (e) The Reserve Provider must notify AEMO of any deviation from the advice provided under **paragraph** (a) as soon as possible.
- (f) AEMO will not be liable to reimburse any costs of the Reserve Provider incurred in respect of deferral of maintenance or repair if AEMO notifies the Reserve Provider of the intended deferral at least 24 hours before the proposed commencement of the maintenance or repair, or within two hours after AEMO's receipt of the Reserve Provider's notice of the maintenance or repair, whichever is the later.

If AEMO gives a notice to defer maintenance or repair at a time that is:

- (a) less than 24 hours prior to the planned commencement of the maintenance or repair; or
- (b) more than two hours after *AEMO*'s receipt of the *Reserve Provider*'s notice of the maintenance or repair,

whichever is the later:

- (c) the Reserve Provider must use reasonable endeavours to defer the maintenance; and
- (d) AEMO must reimburse the Reserve Provider for any reasonable expenses the Reserve Provider incurs that cannot be avoided and are directly attributable to the deferral, upon the Reserve Provider's provision of evidence of incurring of the expense.

## 9 Payments

#### 9.1 Calculation of Payments

(a) The *charges* owed by *AEMO* for *reserve* provided under each *reserve* contract are to be determined in accordance with **item 9** of the relevant **Schedule**.

#### 9.2 Final Statements

(a) Subject to clause **Error! Reference source not found.**, not later than 60 *business days* after the end of each *billing period*, *AEMO* must give the *Reserve Provider* a final statement stating the net amount payable by one party to the other in respect of that *billing period* ("final statement").

#### 9.3 Disputes over Statements

(a) Disputes in relation to a *final statement* must be raised within 6 months of the date of the *billing period* to which the statement relates. If a party does not raise a dispute within that period, the party will be taken to have agreed to the way in which that matter is dealt with in the *final statement*.

#### 9.4 Payment

If a *final statement* indicates that a party must pay the other party a net amount, that party must pay the net amount specified in the *final statement* to the other party (whether or not there is a dispute in relation to the amount payable) on the later of:

- (a) the 20th business day after the end of the billing period; and
- (b) the 2<sup>nd</sup> business day after AEMO gives the final statement.

#### 9.5 Adjustment

- (a) Where the parties agree that the *charges* or any other amounts specified in a *final statement* are incorrect, or it is determined in accordance with **clause 14** that they were incorrect or not payable, or the quantity of *reserve* is amended in accordance with this Agreement or a *reserve contract, AEMO* must issue a replacement statement for the *billing period* stating the correct *charges* or any other amounts payable.
- (b) If a payment has already been made, the party advantaged must pay the other party the amount required to put the other party in the position it would have been in at the time payment was due under **clause 9.5** plus interest on the difference between the amount paid to the party advantaged and the amount that should have been paid. The interest accrues daily at the *bank bill rate* on the relevant day for each day from the date on which payment was made under **clause 9.5** until payment is made under this **paragraph (b)**.
- (c) Payment under **paragraph** (b) must be made on the same day as the next payment is made under **clause 9.5** or set off against an amount due to the party advantaged by the other party, or if no subsequent payments are to occur under **clause 9.5**, within 15 *business days* after the replacement statement is given under **paragraph** (a).

#### 9.6 Set-Off

- (a) Without limiting AEMO's rights under this Agreement or any reserve contract or at law, AEMO may deduct from any money due to the Reserve Provider under this Agreement or a reserve contract any sum that is payable by the Reserve Provider to AEMO whether or not:
  - (i) AEMO's right to payment arises by way of damages, debt, restitution or otherwise; or
  - (ii) the factual basis giving rise to *AEMO's* right to payment arises out of this Agreement, any other agreement, or is independent of any agreement.
- (b) If the money payable to the *Reserve Provider* under this Agreement or any *reserve* contract is insufficient to discharge the liability of the *Reserve Provider* to pay *AEMO* the amount under **paragraph (a)**, the excess will be a debt due and payable and *AEMO* may have recourse to any payments due to the *Reserve Provider* other than under this Agreement or a *reserve contract*. Nothing in **clause 9.7** affects *AEMO*'s rights to recover from the *Reserve Provider* such money, or any balance that remains owing.

#### 9.7 GST

- (a) The *charges* and any other amounts payable to or by *AEMO* under this Agreement or a *reserve contract* exclude *GST*.
- (b) Where a party is required under this Agreement or a reserve contract to reimburse or otherwise pay an amount to another party ("reimbursed party") on account of a cost or expense incurred by that reimbursed party, the amount of the reimbursement will be reduced by the amount of any input tax credit to which the reimbursed party is entitled for an acquisition to which that cost or expense relates.

- (c) If either party makes a *taxable supply* under this Agreement or a *reserve contract*, the party receiving the *taxable supply* must also pay an additional amount equal to the consideration payable for the *supply* multiplied by the applicable *GST* rate.
- (d) AEMO must include the additional amounts contemplated under **paragraph** (c) in statements issued under this Agreement and each party must assist the other party to claim *input tax credits* for *GST* where relevant.
- (e) If the additional amount paid or payable to a party in respect of a *taxable supply* under **paragraph (c)** differs from the actual amount of *GST* payable, adjustments must be made in accordance with the adjustment procedures under **clause 9.8**.
- (f) In **clause 9.7**, "input tax credit", "supply" and "taxable supply" each have the meaning given to those terms in the A New Tax System (Goods and Services Tax) Act 1999 (Cth).
- (g) AEMO will issue tax invoices and adjustment notes in respect of taxable supplies (including supplies taken to be taxable supplies under Subdivision 153-B of the GST Act) made by the Reserve Provider to AEMO under this Agreement, and the Reserve Provider will not issue tax invoices in respect of those supplies.
- (h) The Reserve Provider acknowledges that it is registered for GST purposes on the date of this Agreement and that it will notify AEMO if it ceases to be so registered.
- (i) AEMO acknowledges that it is registered for GST purposes on the date of this Agreement and that it will notify the Reserve Provider if it ceases to:
  - (i) be so registered; or
  - (ii) satisfy any of the requirements for issuing recipient created tax invoices listed in a relevant determination made under subsection 29-70(3) of the GST Act.

## 10 Extent of liability

#### 10.1 AEMO Liability cap

- (a) Subject to **paragraph** (b) and **clause 10.4**, the total amount recoverable from *AEMO* in respect of any and all *claims* arising out of any one or more events during any 12-month period with respect to, arising from, or in connection with, this Agreement, all reserve contracts and the provision of reserve under any of them is limited to a maximum aggregate amount of \$5,000,000.
- (b) Regardless of the nature of any *claim*, *AEMO* is not liable in any circumstances for any:
  - (i) damages or losses that are not direct and do not flow naturally from a breach of this Agreement or a reserve contract, even if they may reasonably be supposed to have been in the contemplation of both parties as a probable result of the breach at the time they entered into this Agreement or a reserve contract;
  - (ii) loss of profit, business opportunity, production, revenue, contract or goodwill (whether direct or indirect); or
  - (iii) damages or loss to the extent that a claim results from the *Reserve Provider's* failure to act in accordance with this Agreement or a reserve contract, legislation or good electricity industry practice.

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#### 10.2 Reserve Provider Liability Cap

(a) Subject to **paragraph** (b), the total amount recoverable from the *Reserve Provider* in respect of any and all *claims* arising out of any one or more events during any 12-month period with respect to, arising from, or in connection with, this Agreement, all

reserve contracts and the provision of the reserve under any of them is limited to a maximum aggregate amount of \$5,000,000.

- (b) Regardless of the nature of any *claim*, the *Reserve Provider* is not liable in any circumstances for any:
  - (i) damages or losses that are not direct and do not flow naturally from a breach of this Agreement or a reserve contract, even if they may reasonably be supposed to have been in the contemplation of both parties as a probable result of the breach at the time they entered into this Agreement or a reserve contract:
  - (ii) loss of profit, business opportunity, production, revenue, contract or goodwill (whether direct or indirect); or
  - (iii) damages or loss to the extent that a claim results from AEMO's failure to act in accordance with this Agreement or a reserve contract, legislation or good electricity industry practice.

#### 10.3 Indemnity

Subject to **clause 10.2**, the *Reserve Provider* indemnifies *AEMO* against any liability or loss arising from, and any costs, charges or expenses incurred in connection with, a *claim* by a third person against *AEMO* with respect to, arising from, or in connection with, any act or omission of the *Reserve Provider* in relation to the provision of *reserve*.

#### 10.4 National Electricity Law

This Agreement does not vary or exclude the operation of sections 116, 119 or 120 or 120A of the *National Electricity Law*.

#### 10.5 Civil Liability Act 2002

The parties agree that Part 4 of the Civil Liability Act 2002 (NSW) will not apply to any *claim*, action, suit or proceeding under or in connection with this Agreement or any *reserve contract*.

## 11 Force majeure

#### 11.1 Effect on performance of obligation

A party's obligation under this Agreement and any reserve contract (other than an obligation to pay money) shall be suspended during the time and to the extent that the party ("affected party") is unable to comply with that obligation by reason of the occurrence of an event of force majeure.

#### 11.2 Obligation to Notify

If an *affected party* becomes aware of a circumstance it reasonably considers constitutes or is likely to constitute or result in an *event of force majeure*, it must:

- (a) immediately give the other party notice of the circumstances and of the obligations under this Agreement and any *reserve contract* that have been, or will be, or are likely to be, affected by that circumstance; and
- (b) keep the other party informed both at reasonable intervals and upon request by the other party as soon as practicable following the receipt of that request of:
  - (i) the affected party's estimate of the likely and actual commencement (as appropriate) of and duration of the event of force majeure;
  - (ii) the action taken and the action proposed to be taken by the *affected party* in complying with **clause 11.3(a)**;
  - (iii) the cessation of the *event of force majeure* or the successful mitigation of the effects of the *event of force majeure*; and

(iv) any other matter the other party reasonably requests in connection with the occurrence of the *event of force majeure* and the matters referred to in **paragraph (b)**.

#### 11.3 Obligation to mitigate

- (a) As soon as practicable after the occurrence of an *event of force majeure*, the *affected party* must use reasonable endeavours (including incurring any reasonable expenditure of funds and rescheduling manpower and resources) to mitigate the consequences of that *event of force majeure* and minimise any resulting delay in the performance of its obligations under this Agreement or a *reserve contract*.
- (b) The suspension granted under **clause 11.1** does not include any delay in the performance of the affected obligation attributable to a failure by the *affected party* to comply with **paragraph (a)**.
- (c) The *affected party* bears the onus of proving that it has complied with its obligations under **paragraph** (a).
- (d) Nothing in **clause 11** requires the *affected party* to settle or compromise a *labour dispute* where the *affected party*, in its sole and absolute discretion, considers that course to be inappropriate.

## 12 Termination

#### 12.1 Termination for default

A party ("terminating party") may immediately terminate this Agreement or any reserve contract by notice to the other party ("defaulting party") if:

- (a) the *defaulting party* does not pay any money due under this Agreement or any reserve contract on the due date and the *defaulting party* does not pay the money within a further period of 45 *business days* after the *terminating party* serves notice on the *defaulting party* requiring payment;
- (b) subject to **clause 12.2** the *defaulting party* does not carry out or meet any other material obligation under this Agreement or any *reserve contract* and in the case of a default that is capable of remedy, does not remedy that default within 60 *business days* after the *terminating party* serves notice on the *defaulting party* requiring it to be remedied;
- (c) any representation or warranty made by the *defaulting party* in this Agreement or any *reserve contract* is materially inaccurate or untrue; or
- (d) an *insolvency event* occurs in relation to the *defaulting party*.

#### 12.2 Termination by AEMO

- (a) AEMO may terminate this Agreement or any reserve contract by giving notice to the Reserve Provider if, after being required by AEMO to do so, the Reserve Provider.
  - (i) fails to demonstrate that it is capable of meeting the *contracted levels of performance*; or
  - (ii) indicates that the *reserve equipment* might not be capable of providing the relevant *reserve* in accordance with the *contracted levels of performance*.
- (b) AEMO may terminate this Agreement without charge by giving notice to the Reserve Provider if the Reserve Provider fails to activate the reserve in a trading interval to more than 80% of the amount specified in an instruction for that trading interval.

#### 12.3 Termination for convenience

(a) AEMO may terminate this Agreement by giving the Reserve Provider not less than 5 business days' notice.

(b) The Reserve Provider may terminate this Agreement by giving AEMO not less than 15 business days' notice.

#### 12.4 Effect of termination of Agreement on reserve contract

- (a) Subject to paragraph (b), any *reserve contract* under this Agreement will terminate effective immediately upon the termination of this Agreement under **clause 12.1** or **12.2**.
- (b) Termination of this agreement under **clause 12.3** or the expiry of this Agreement under **clause 4**, does does not affect the continuation of any *reserve contract*.

#### 12.5 Termination Notices

A notice to terminate issued under clause 12.1, 12.2 or 12.3 takes effect on the later of:

- (a) the time it is given; and
- (b) the time specified in the notice.

#### 12.6 Survival

- (a) Expiry or termination of this Agreement or any reserve contract for any reason does not affect:
  - (i) any rights of either party against the other that:
    - (A) arose prior to the time at which expiry or termination occurred; and
    - (B) otherwise relate to or might arise at any future date from any breach of this Agreement or a *reserve contract* occurring prior to the expiry or termination; or
  - (ii) the rights and obligations of the parties under clauses 7.1 to 7.5, 9, 10, 14 and 17.

#### 12.7 Effect of termination

Termination of this Agreement under **clause 12.1** or 12.2 also has the effect of terminating all *reserve contracts*.

#### 12.8 Reduction of Reserve

If AEMO can terminate a *reserve contract* under **clause 12.1**, or **12.2**, AEMO may instead elect to reduce the *reserve* to be provided under the *reserve contract* by specifying so in the notice issued under **clause 12.1** or **12.2** (as applicable).

#### 12.9 No other termination

Subject to any written law to the contrary, a party must not terminate this Agreement or any *reserve contract* other than for a ground provided for under this Agreement.

## 13 Assignment and sub-contracting

#### 13.1 Assignment

- (a) The Reserve Provider must not dispose its rights in this Agreement or any reserve contract or, in respect of reserve equipment owned, operated or controlled by the Reserve Provider, reserve equipment without first obtaining AEMO's consent, which must not be unreasonably withheld or delayed.
- (b) AEMO must give its consent for the purposes of paragraph (a) if:
  - (i) the Reserve Provider disposes of the reserve equipment to one person or a group of persons ("assignee"); and
  - (ii) the assignee executes and delivers to AEMO a deed (in form and substance satisfactory to AEMO) prior to the disposal by which the

assignee agrees to assume obligations that are substantially equivalent to the Reserve Provider's obligations under this Agreement or any reserve contract.

#### 13.2 Sub-contracting

- (a) If the Reserve Provider sub-contracts the performance of obligations under this Agreement or any reserve contract, the Reserve Provider remains responsible for the performance of those obligations.
- (b) If AEMO sub-contracts the performance of obligations or rights under this Agreement or any *reserve contract*, AEMO remains responsible for the performance of those obligations and rights.

## 14 Dispute resolution

#### 14.1 Registered Participant dispute resolution procedure

If the Reserve Provider is a Registered Participant:

- (a) If a dispute arises in relation to this Agreement or any reserve contract, the first stage dispute resolution processes and the second stage dispute resolution processes apply.
- (b) A party must not have recourse to litigation or second stage dispute resolution processes unless it has either given or received a DMS referral notice.
- (c) **Paragraph (b)** does not prevent a party seeking an urgent interlocutory injunction from a court of competent jurisdiction.
- (d) Unless otherwise agreed or determined under the *first stage dispute resolution* processes or the second stage dispute resolution processes, the parties must continue to perform their obligations despite the operation of **clause 14**.

#### 14.2 General dispute resolution procedure

If the Reserve Provider is not a Registered Participant:

- (a) If a party claims that a dispute has arisen between the parties relating to or arising out of this Agreement or a *reserve contract* ("*dispute*"), they must give the other party a notice ("*dispute notice*").
- (b) A dispute notice must include details of:
  - (i) the nature of the dispute and the circumstances giving rise to the *dispute*:
  - (ii) the party's proposed resolution of the *dispute*; and
  - (iii) contact details of the relevant delegate of that party with authority to resolve the *dispute* ("*delegate*").
- (c) Upon provision of a *dispute notice*, the procedure that is to be followed to settle a *dispute* is as follows:
  - (i) first, negotiation under paragraph (d);
  - (ii) second, if the *dispute* is not resolved by negotiation, mediation under **paragraphs** (e) and (f);
  - (iii) third, if the *dispute* is not resolved by mediation within one month of the appointment of the mediator, the parties agree that either party may commence proceedings in court.
- (d) Within 7 days after the date of the *dispute notice*, the *delegates* must meet and use their best endeavours to agree to a resolution of the *dispute*.

- (e) If the *dispute* is not resolved by the *delegates* within 7 days of their first meeting or by such other timeframe as the parties agree, either party may refer the *dispute* to mediation by a single mediator appointed by agreement of the parties or if they fail to agree within 30 days of referral to mediation, a mediator appointed by the President of the Institute of Arbitrators and Mediators Australia ("*IAMA*") acting on the request of either party.
- (f) Unless the parties agree otherwise:
  - (i) the mediation will be conducted by a mediator under the *IAMA* Mediation Rules (whether or not the mediator is a legal practitioner), except that to the extent of any inconsistency between this Agreement and the *IAMA* Mediation Rules, this Agreement will prevail;
  - (ii) each party may appoint a person, including a legally qualified person, to represent it or assist it in the mediation;
  - (iii) each party will bear their own costs relating to the preparation for and attendance at the mediation; and
  - (iv) the costs of the mediator and any other incidental costs will be borne equally by the parties.
- (g) Clause 14 does not prevent a party seeking an urgent interlocutory injunction from a court of competent jurisdiction.
- (h) Unless otherwise agreed, the parties must continue to perform their obligations under this Agreement and any *reserve contract* despite the existence of a *dispute*.

#### 15 Warranties

- (a) The *Reserve Provider* represents and warrants to *AEMO* as at the date of this Agreement and at all times after the date of this Agreement that:
  - during the period of activation of the reserve there will not be an increase in the demand or consumption of electricity from the network by any other equipment, plant or process owned, contracted or controlled directly or indirectly by the Reserve Provider;
  - (ii) it and its *representatives* are duly qualified and skilled to provide *reserve*;
  - it will provide reserve in accordance with all relevant legislation, good electricity industry practice and relevant Australian Standards and codes of practice;
  - (iv) it will ensure that data of the provision of reserve provided to AEMO for AEMO's use in calculating payments and issuing statements in accordance with clause 9 will be in a form suitable for use in AEMO's systems, and will accurately reflect the level of provision of reserve;
  - (v) the quantity of reserve available as notified by the Reserve Provider to AEMO from time to time including any quantity notified in the Web Portal is true and correct;
  - (vi) the Reserve Provider's obligations under this Agreement and any reserve contract are enforceable in accordance with their terms;
  - (vii) if *reserve* is being provided under a *reserve* contract:
    - (A) through the reduction of load, any relevant end users of electricity have agreed in writing to reducing their consumption of electricity or having their supply of electricity interrupted for the Reserve Provider to provide the reserve in accordance with a reserve contract; or

- (B) by generation increase, the owners of the generating units have agreed in writing with the Reserve Provider that the generating units may be utilised to enable the Reserve Provider to provide the reserve in accordance with a reserve contract; and
- (viii) the *Reserve Provider* is entitled to carry out its obligations under this Agreement and any *reserve contract*.
- (b) AEMO represents and warrants to the Reserve Provider as at the date of this Agreement and at all times after the date of this Agreement that its obligations under this Agreement and any reserve contract are enforceable in accordance with their terms.

## 16 Compliance with Legislation and the Requirements of an Authority

- (a) Each party must comply with *legislation* in any way affecting this Agreement and any reserve contract.
- (b) Each party must procure that all notices required to be given, all consents required to be obtained and any form of authorisation, registration or certification required by legislation for the purpose of complying with its obligations under this Agreement and any reserve contract are given or obtained.
- (c) Each party must pay all fees and bear all costs connected with such notices, consents, authorisations, registrations and certifications.
- (d) Each party must, upon demand by the other party ("requesting party") at any time, provide to the requesting party all information necessary to establish to the satisfaction of the requesting party that the requirements of **paragraph** (b) have been complied with.

#### 17 General

#### 17.1 Notices

- (a) Subject to **paragraph (b)** and the **Schedules**, all *communications* to a party must be:
  - (i) in writing;
  - (ii) marked to the attention of the person named in respect of that party in the **Details**; and
  - (iii) left at, sent by ordinary pre-paid post (airmail if posted to or from a place outside Australia), or in electronic form, to the address, number, or electronic mail address of the addressee specified in respect of that party in the **Details**.
- (b) Subject to the *Rules*, any:
  - (i) communications given in the course of the day-to-day running of the national grid or the national electricity market by or on behalf of a party to the other including instructions;
  - (ii) request for reserve made by AEMO and Confirmations from AEMO;
  - (iii) offers to provide reserve in accordance with a Reguest for Tender, or
  - (iv) notifications of availability of the *reserve* and *NMIs* and *datastream* suffixes by the Reserve Provider in accordance with this Agreement,

must be made by automated electronic process, telephone or other instantaneous means of *communication* as notified by *AEMO*.

- (c) Unless *communications* under **paragraph** (b) are recorded in some other way satisfactory to both parties, the parties must ensure that logs are kept in which persons or electronic systems giving and receiving those *communications* record brief details of their substance and timing.
- (d) Unless a later time is specified in it, a *communication* takes effect from the time it is received.
- (e) A *communication* is taken to be received:
  - (i) in the case of a posted letter, on the 3<sup>rd</sup> (7<sup>th</sup>, if posted to or from a place outside Australia) *business day* after posting:
  - in the case of an electronic message, on production of a report by the computer from which the electronic message was sent that indicates that the message was received in its entirety at the electronic mail address of the recipient; and
  - (iii) in the case of *communications* under **paragraph** (b), instantaneously.
- (f) Other than *communications* given under **paragraph** (b), if a *communication* is received, or deemed to be received, on a day that is not a *business day*, or after 4:00pm *EST* on a *business day*, it is taken to be received on the next *business day*.
- (g) A party may at any time by notice given to the other party designate a different person, address or electronic mail address for the purposes of **clause 17.1** and the **Details** and any **Schedule**.
- (h) If the automated electronic process, telephone or other instantaneous means of communication notified by AEMO for the purposes of clause 17.1(b) requires a data network connection to MarketNet, the Reserve Provider agrees to comply with the AEMO terms of use applicable to such connection as notified by AEMO from time to time.

#### 17.2 Exercise of Rights

Subject to the express provisions of this Agreement or a *reserve contract*, a party may exercise a right, power or remedy at its discretion, and separately or concurrently with another right, power or remedy. A single or partial exercise of a right, power or remedy by a party does not prevent a further exercise of that or of any other right, power or remedy. Failure by a party to exercise or delay in exercising a right, power or remedy does not prevent its exercise.

#### 17.3 No Waiver or Variation

A right may only be waived in writing, signed by the party giving the waiver and:

- (a) no other conduct of a party (including a failure to exercise, or delay in exercising, the right) operates as a waiver of the right, or otherwise prevents the exercise of the right;
- (b) a waiver of a right on one or more occasions does not operate as a waiver of that right if it arises again; and
- (c) the exercise of a right does not prevent any further exercise of that right or of any other right.

#### 17.4 Amendment

An amendment to this Agreement or a *reserve contract* will be effective only if made in writing and signed by the parties.

#### 17.5 Approvals and Consents

Subject to the express provisions of this Agreement or a *reserve contract*, a party may give conditionally or unconditionally or withhold its approval or consent in its absolute discretion.

#### 17.6 Continuing Indemnities

Each indemnity in this Agreement or a *reserve contract* is a continuing obligation, separate and independent from the other obligations of the parties and survives the end of this Agreement or a *reserve contract*.

#### 17.7 Payment not necessary before Claim

It is not necessary for a party to incur expense or make payment before enforcing a right of indemnity conferred by this Agreement or a *reserve contract*.

#### 17.8 Costs and Expenses

Costs, fees and expenses of a party covered by a right of indemnity include legal expenses, fees and charges incurred by the indemnified party on a solicitor-own client basis and are not subject to taxation on a party-and-party or any other basis.

#### 17.9 Further Assurances

Each party agrees, at its own expense, on the request of another party to:

- do everything reasonably necessary to give effect to this Agreement and any reserve contract and the transactions contemplated by them (including the execution of documents); and
- (b) use reasonable endeavours to cause relevant third parties to do likewise if necessary or desirable.

#### 17.10 Supervening Legislation

Any present or future *legislation* that operates to vary an obligation or right, power or remedy of a person in connection with this Agreement or a *reserve contract* is excluded to the extent permitted by law.

#### 17.11 Severability

If a provision of this Agreement or a *reserve contract* is void, unenforceable, or illegal in a jurisdiction, it is severed for that jurisdiction. The remainder of this Agreement or the *reserve contract* remains effective and the validity or enforceability of that provision in any other jurisdiction is not affected. This **clause 17.11** has no effect if the severance alters the basic nature of this Agreement or the *reserve contract* or is contrary to public policy.

#### 17.12 Entire Agreement

- (a) Subject to the *Rules*, this Agreement constitutes the entire agreement of the parties in connection with membership of the Panel and any previous agreements, understandings and negotiations on that subject matter cease to have any effect.
- (b) Subject to the Rules, each reserve contract constitutes the entire agreement of the parties in connection with the supply of reserve for the period covered by the reserve contract and any previous agreements, understandings and negotiations on that subject matter cease to have any effect.

#### 17.13 Confidential Information

All information exchanged between the parties under this Agreement or a *reserve contract* or during the negotiations preceding such agreements is declared by *AEMO* to be *confidential information* and must not be disclosed to any person except:

- (a) for the purpose of assessing the viability and deliverability of the *reserve*, in which case the *Reserve Provider* hereby grants its consent to any relevant disclosures;
- (b) in accordance with the Rules; and
- (c) to persons nominated by participating jurisdictions for the purpose of AEMO consulting with participating jurisdictions and agreeing cost-sharing arrangements between regions (if applicable) as required under the National Electricity Rules in

- which case the *Reserve Provider* hereby grants its consent to any relevant disclosures:
- (d) as contemplated by for the purpose complying with the Rules, the RERT guidelines and any relevant procedures published by AEMO in accordance with the Rules in which case the Reserve Provider hereby grants its consent to any relevant disclosures; and
- (e) AEMO may publish the name of the Reserve Provider, the reserve volume (MW) and the term of this Agreement at the same time as it publishes details of agreements for long notice reserve (being reserve in response to a 'long-notice situation', as that term is described in the RERT guidelines) in accordance with the RERT guidelines in which case the Reserve Provider hereby grants its consent to any relevant disclosures.

#### 17.14 No other representations or warranties

Each party acknowledges that, in entering into this Agreement or a *reserve contract* it has not relied on any representations or warranties about its subject matter except as provided in this Agreement or the *reserve contract*.

#### 17.15 Counterparts

This agreement may be executed in counterparts. All counterparts when taken together are deemed to constitute one instrument. The counterparts may be executed and delivered by email or other electronic signature by one or more of the parties and the receiving party or parties may rely on the receipt of such document so executed and delivered electronically as if the original had been received.

#### 17.16 Governing Law & Jurisdiction

This Agreement, each *reserve contract* and the transactions contemplated by them are governed by the laws in force in the jurisdiction referred to in the **Details**. Each party submits to the non-exclusive jurisdiction of the courts of that place.

#### 17.17 No partnership, agency or trust

Nothing contained or implied in this Agreement or a reserve contract:

- (a) constitutes or may be deemed to constitute a party the partner, agent or legal representative of any other party for any purpose whatsoever, or create or be deemed to create any partnership; or
- (b) creates or may be deemed to create any agency or trust.

#### 17.18 Role of *AEMO*

- (a) Nothing in this Agreement will oblige *AEMO* to grant or exercise any administrative or regulatory discretion, or otherwise fetter, constrain or otherwise impair the due exercise of any administrative or regulatory discretion exercisable by *AEMO*.
- (b) Anything which AEMO does, fails to do or purports to do pursuant to its statutory rights, duties, powers and functions conferred by or under any law will not be deemed to be an act or omission of AEMO under this Agreement.

#### **EXECUTED** as an agreement

# Schedule 1 – Short-Notice Reserve – Unscheduled Reserve (Generation Increase)

#### 1 Definitions

#### In this Schedule:

"activation" means synchronising the reserve equipment where required and increasing its output to the firm capacity.

"activation constraints" are detailed in the table in Item 5.1.

"activation end time" means the time the activation of the reserve must cease.

"activation instruction" means an instruction from AEMO for the reserve to become activated or de-activated (as the case may be).

"activation lead time" means the maximum period required by the Reserve Provider to activate reserve in response to an activation instruction and is specified in **Item 4**.

"activation start time" means the time by which the reserve specified in an activation instructions is to be activated.

"block" means the minimum amount of reserve that can be activated by AEMO.

"de-activation" means reducing the output of the reserve equipment to the network as quickly as practicable until it is below its market capacity or is de-synchronised.

"de-activation lead time" means the maximum period required to disable the reserve equipment and is specified in **Item 4**.

"firm capacity" means the reserve equipment loading level specified in Item 3.

"instruction" means any notification by AEMO to the Reserve Provider in respect of the provision of reserve in accordance with a reserve contract.

"market capacity" means the loading level specified in Item 3, which is:

- (a) is considered by AEMO to be likely to be available to the market; or
- (b) provided, or will be provided, or made available for provision under any other arrangement or agreement.

"minimum operating level" means the minimum loading level at which the reserve equipment can operate continuously and is specified in **Item 4**.

"NMI Notification Date" means 1 November 2020.

"pre-activation" means preparing the reserve equipment for activation.

"pre-activation instruction" means an instruction to pre-activate the reserve equipment.

"pre-activation lead time" means the maximum period required to prepare the reserve equipment for activation and is specified in **Item 4**.

"Vic AMI meter" means a smart meter installed in Victoria as part of the Victorian Government's Advanced Metering Infrastructure (AMI) Program

"weekday" means a day that is not a Saturday or Sunday or observed as a public holiday in the region in which the reserve is located.

#### 2 Tenders for the Provision of Reserve

#### 2.1 Contact Persons for Tenders

Subject to clause 17.1(b), *Requests for Tender* will be given on behalf of *AEMO* and any communications concerning a *Request for Tender* and offers in response to a *Request for Tender*, must be submitted on behalf of the *Reserve Provider* by the persons nominated in the table below:

	AEMO
Contact Person at all times:	
Name/Title:	Control Room Manager
Telephone No: Email:	
Res	serve Provider
Contact Person at all times:	
Name/Title:	
Telephone No:	
Email:	
Backup Contact Person at all times:	
Name/Title:	
Telephone No:	
Email:	

### 2.2 No obligation to make an offer

The Reserve Provider is not obliged to respond to a Request for Tender and offer the reserve to AEMO if the Request for Tender relates to a request for reserve during the following periods:

Date	Time

## 3 Description of Reserve

The *reserve* comprises the provision of *generation* as described below:

Name of Generating Unit	Firm Capacity (MW)	Market Capacity (MW)	Reserve (MW) (Firm Capacity – Market Capacity)

Total Reserve MW

## **4 Reserve Equipment**

Name of Oanantina Haitt	
Name of Generating Unit <sup>1</sup>	
Registration Status	[market/non-market]
Location	
Connection Point	
Minimum Operating Level	[ ] MW
Pre-activation Lead Time	[ ] hours
Activation Lead Time	[ ] hours
De-Activation Lead Time	[ ] hours

## 5 Capabilities of Reserve Equipment

## 5.1 Activation Constraints

The reserve equipment is subject to the following activation constraints:

Name of Generating Unit <sup>1</sup>	
Minimum run-time, i.e. the minimum period the generating unit must generate.	[ ] hours
For the avoidance of doubt, AEMO may issue an instruction to deactivate the reserve while the reserve is within the minimum runtime so that the de-activation lead time and minimum run-time are satisfied concurrently at the end of the minimum run-time.	
Minimum off-time, i.e. the minimum period between the last time the <i>generating unit</i> was	[ ] hours

<sup>&</sup>lt;sup>1</sup> Copy table and use one for each Generating Unit involved.

generating and the time at which the generating unit can recommence generating.	
Other activation constraints	

## **6 Contracted Levels of Performance**

The *contracted levels of performance* comprise the provision of *generation* by the *reserve equipment* up to the total *reserve* that conforms to the following requirements:

#### 6.1 Minimum Technical Requirements

- (a) The *reserve* must be capable of being *activated* by *instructions* to a single point of contact with operational responsibility for the *reserve*;
- (b) The *reserve* must be capable of being *activated* as a *block* of not less than 10 MW, which may be made up of smaller components that are managed by the *Reserve Provider*;
- (c) The reserve must capable of remaining activated for at least 1 hour;
- (d) Each generating unit comprising the reserve equipment must have a type 1, 2, 3 or 4 metering installation as required by Schedule 7.2 of the Rules or a Vic AMI meter to measure the electrical output or change in electrical consumption as a result of an activation; and
- (e) Each *generating unit* comprising the *reserve equipment* must be capable of *supplying* electricity to the *regional reference node* in the *region* where the *reserve* is or may be required.

#### 6.2 Performance Criteria

The Reserve Provider must be capable of:

- (a) upon receiving from AEMO a pre-activation instruction, pre-activating the reserve equipment within the pre-activation lead time;
- (b) upon receiving from AEMO an activation instruction, generating at the rate of change of the level of generation required by the activation instruction;
- (c) upon receiving from AEMO an activation instruction to de-activate, deactivating the reserve equipment within the de-activation lead time; and
- (d) delivering at least 80% of the quantity of *reserve* specified in the *reserve* contract during each trading interval covered by an activation instruction.

#### 6.3 Availability notification by the Reserve Provider

At all times during a reserve contract, the Reserve Provider must notify AEMO of the quantity of reserve (MW) available.

The Reserve Provider must notify AEMO of the quantity of reserve available by specifying the quantity of reserve available (MW) in the Web Portal. The quantity specified by the Reserve Provider must not exceed the quantity specified in the reserve contract.

If the *Reserve Provider* becomes aware of a material change of circumstances following the entry into a *reserve contract*, the *Reserve Provider* must as soon as practicable after becoming aware of it advise *AEMO*.

## 7 Requests for Provision of Reserve

#### 7.1 What AEMO may Request

Subject to any advice from the Reserve Provider that the reserve is not available, at any time during a reserve contract, AEMO may request the provision of any level of generation between the market capacity and the firm capacity.

#### 7.2 Method of Requests

*Instructions* will be given by telephone, which *AEMO* will record in accordance with Rule 4.11.4, or such other method as notified by AEMO.

#### 7.3 Contact Persons for Operational Purposes

Subject to clause 17.1(b), *instructions* will be given and received and communications concerning *instructions* must be made by the following persons on behalf of each party:

	AEMO
Contact Person at all times:	
Name/Title:	Control Room Operator on shift
Telephone No:	
Email:	
Res	serve Provider
Contact Person at all times:	
Name/Title:	
Telephone No:	
Email:	
Backup Contact Person at all times:	
Name/Title:	
Telephone No:	
Email:	

#### 7.4 **Pre-Activation Instruction**

Subject to any activation constraints, AEMO may issue a pre-activation instruction at any time during a reserve contract requiring the Reserve Provider to:

- (a) increase the reserve equipment's output to the minimum operating level; or
- (b) prepare the reserve equipment to activate above its market capacity.

AEMO may also request a time earlier than the time contemplated in **Item 4** by which the *reserve equipment* is to reach its *minimum operating level* or *market capacity*. The *Reserve Provider* must use reasonable endeavours to comply with the request.

The issue of a *pre-activation instruction* does not imply that an *activation instruction* will be issued.

### 7.5 Activation Instruction

Subject to any activation constraints, AEMO may issue an activation instruction to the Reserve Provider at any time during a reserve contract requesting the Reserve Provider to activate or de-activate the reserve. An activation instruction:

- (a) must specify the activation start time (taking into account the activation lead time) and the activation end time (taking into account the de-activation lead time);
- (b) must specify the *reserve* to be *activated* for each *trading interval* (in MWh) from the *activation start time* to the *activation end time*, which unless agreed otherwise between the parties, must not be more than the *firm capacity*: and
- (c) must not require the reserve equipment to generate below the minimum operating level unless the activation instruction is an instruction to de-activate.

The Reserve Provider must comply with an activation instruction that complies with these requirements.

#### 7.6 Terminating activation instruction

- (a) At any time prior to the activation start time (taking into account the activation lead time) specified in an activation instruction AEMO may issue an instruction to the Reserve Provider terminating that activation instruction if AEMO acting reasonably, considers that the reserve to be provided pursuant to that activation instruction is not required.
- (b) Taking into account the *activation lead time*, the *Reserve Provider* must comply with an *instruction* under (a).

## **8 Measurement and Verification**

#### 8.1 Measurement

Actual interval metering data (not estimated metering data or substituted metering data) will be used to determine the quantity of reserve activated by the reserve equipment.

The Reserve Provider must provide to AEMO a list of NMI's and datastreams used to provide reserve in response to activation within 2 business days after activation.

The *NMI*'s and *datastreams* provided in the list by the *Reserve Provider* must only be *NMI*'s and *datastreams* that were notified to *AEMO* by the *Reserve Provider* prior to the *NMI Notification Date*.

Any relevant *metering installation* must be installed by a *Metering Provider*, and data collected by an *AEMO* accredited Metering Data Provider (category MDP 1-4 or, in respect of *Vic AMI meters*, such category accredited by *AEMO* entitled to collect data for *Vic AMI meters*).

The maximum level at which the *reserve* is taken to have been *activated* will be the level specified in relevant *activation instruction*.

#### 8.2 Verification

AEMO's market systems and energy management systems will be used to verify the quantity of reserve activated in accordance with a reserve contract.

If AEMO requests further information relating to the measurement and determination of the *activated reserve*, the *Reserve Provider* must provide that information to AEMO within 2 business days of AEMO's request.

The Reserve Provider will not be entitled to be paid the usage charge in relation to reserve provided by a NMI that is also included as a NMI in a list by another reserve provider. AEMO will notify the Reserve Provider of any NMI included in a list provided by the Reserve Provider which is included in a list by another reserve provider.

The Reserve Provider will only be entitled to be paid a usage charge in relation to reserve provided by NMIs that were notified to AEMO by the Reserve Provider prior to the NMI Notification Date.

## 9 Charges

#### 9.1 Billing Period

Subject to clause 8, for each *billing period*, the *Reserve Provider* will be entitled to charge *AEMO* 

- (a) a pre-activation charge equal to product of \$XX and the number of times a pre-activation instruction (not including instructions amending previous instructions) is given during the billing period; and
- (b) where reserve has been activated in accordance with a reserve contract during the billing period, a usage charge, which is equal to the product of \$XX, and the quantity (in MWh) of the reserve activated by the reserve equipment as measured at its connection point during each trading interval as a result of an activation instruction under a reserve contract.

Not more than one *pre-activation charge* is payable in a 24 hour period.

#### 9.2 Adjustment to charges

- (a) If, in respect of an activation instruction, either:
  - (i) the Reserve Provider has not activated the reserve in accordance with an activation instruction by the activation start time and, prior to the Reserve Provider activating the reserve but after the activation start time, AEMO has initiated involuntary load shedding; or
  - (ii) the Reserve Provider has not activated the reserve within 10 minutes of the activation start time (irrespective of whether or not AEMO has initiated involuntary load shedding); or
  - (iii) the Reserve Provider activates the reserve before the activation start time or within 10 minutes of the activation start time but does not then keep the reserve activated in full until the activation end time (or any earlier time if AEMO has instructed, or consented to, the Reserve Provider de-activating the reserve prior to the activation end time).
  - (iv) the Reserve Provider was already generating when AEMO issued the pre-activation instruction,

then the Reserve Provider is not entitled to any pre-activation charge in respect of the reserve contract (and the pre-activation charge associated with that reserve contract will be \$0).

(b) If the Reserve Provider has not activated the reserve in the amount required in the activation instruction:

- (i) within 10 minutes of the activation start time; or
- (ii) AEMO has initiated involuntary load shedding between the activation start time and the activation in the amount required in the activation instruction.

then the *pre-activation charge* payable in respect of that *reserve contract* will be determined as follows:

$$A = B \times (C / D MW)$$

where:

- A = the *pre-activation charge* payable in respect of that *reserve* contract;
- B = the *pre-activation charge* that would otherwise have been payable under that reserve contract as determined in accordance with **item 9.1(a) above**; and
- C = the Firm Capacity (in MW) of any reserve which was activated by the Reserve Provider before the activation start time or within 10 minutes of the activation start time and prior to any involuntary load shedding by AEMO that was initiated after the activation start time, and that was then activated in full until the activation end time (or any earlier time if AEMO has instructed, or consented, to the Reserve Provider de-activating the reserve prior to the activation end time).
- D = the quantity of Reserve specified in a Request for Tender.
- (c) If the Reserve Provider has activated the reserve to a level that is no more than 80% of the amount required in the activation instruction, then the preactivation charge payable in respect of that reserve contract will be determined as follows:

$$A = B \times (C / D MW)$$

where:

- A = the *pre-activation charge* payable in respect of that *reserve* contract:
- B = the *pre-activation charge* that would otherwise have been payable under that reserve contract as determined in accordance with **item 9.1(a) above**; and
- C = the Firm Capacity (in MW) of any reserve which was activated by the Reserve Provider before the activation start time or within 10 minutes of the activation start time and that was then activated in full until the activation end time (or any earlier time if AEMO has instructed, or consented, to the Reserve Provider de-activating the reserve prior to the activation end time).
- D = the quantity of Reserve specified in a Request for Tender.

(d) If the Reserve Provider offers to provide a quantity of reserve that is less than the quantity of Reserve specified in a Request for Tender, and AEMO accepts that offer, then the pre-activation charge payable in respect of the resulting reserve contract will be determined as follows:

$$E = F \times (G / H)$$

where:

- E = the *pre-activation charge* payable in respect of that *reserve contract*;
- F = the *pre-activation charge* that would otherwise have been payable under that *reserve contract* as determined in accordance with item 9.1(a) above; and
- G = the aggregate Firm Capacity (in MW) of all *reserve* that is the subject of that *reserve contract*.
- H = the quantity of Reserve (in MW) specified in a Request for Tender.
- (e) The adjustments under this **Item 9.2** to a *pre-activation charge* do not affect any other provision of this Agreement, including the payment of the *usage charge* in respect of any *reserve* which is *activated* during a *Reserve Period*.
- (f) To the extent that:
  - (i) the adjustments under **Item 9.2(a)** applies and the adjustment under either or both of **Items 9.2(b)** and **(c)** also apply, only the adjustment under paragraph **(a)** is to be applied.
  - the adjustments under both of **Items 9.2(b)** and **(c)** apply, only the adjustment under **Item 9.2(c)** is to apply.

# Schedule 2 – Short-Notice Reserve – Unscheduled Reserve (Load Reduction)

#### 1 Definitions

#### In this Schedule:

"activation constraints" are detailed in the table in item 4.

"activation end time" means the time the activation of the reserve specified in an activation instruction must cease.

"activation instruction" means an instruction from AEMO for the reserve to be activated or de-activated (as the case may be).

"activation lead time" means the maximum period between the issue of an activation instruction and the time at which the reserve is activated and is specified in **Item 4**.

"block" means the minimum amount of reserve that can be activated by AEMO.

"consumer" means a person listed as such in Item 3.

"de-activate" means the cessation of the provision of reserve required by an activation instruction and resuming the taking of supply of electricity.

"de-activation lead time" means the maximum period required for the reserve to be deactivated and is specified in **Item 4**.

"firm capacity" means the loading level specified in Item 3.

"instruction" means any notification by AEMO to the Reserve Provider in respect of the provision of reserve in accordance with a reserve contract.

"load reduction" is the reduction (in MW) in the level at which electricity is taken from the network at the connection points specified in **Item 3**.

"market capacity" means the loading level specified in Item 3, which is:

- (a) considered by AEMO to be likely to be available to the market; or
- (b) provided, or will be provided, or made available for provision under any other arrangement or agreement, including any demand side management arrangement or agreement.

"NMI Notification Date" means 1 November 2020.

"pre-activation" means preparing reserve for activation.

"pre-activation instruction" means an instruction to the Reserve Provider to prepare the reserve for activation.

"pre-activation lead time" means the maximum period required for the reserve to reach a state of readiness to act upon an activation instruction and is specified in **Item 4**.

"standby generating unit" means a generating unit that is not connected to the network and will generate in order for the Reserve Provider to provide the reserve.

"Vic AMI meter" means a smart meter installed in Victoria as part of the Victorian Government's Advanced Metering Infrastructure (AMI) Program

"weekday" means a day that is not a Saturday or Sunday or observed as a public holiday in the region in which the reserve is located.

# 2 Tenders for the Provision of Reserve

## 2.1 Contact Persons for Tenders

Subject to clause 17.1(b), *Requests for Tender* will be given on behalf of *AEMO* and any communications concerning a *Request for Tender* and offers in response to a *Request for Tender*, must be submitted on behalf of the *Reserve Provider* by the persons nominated in the table below:

Α	EMO
Contact Person at all times:	
Name/Title:	Control Room Manager
Telephone No:	
Email:	
Reserv	ve Provider
Contact Person at all times:	
Name/Title:	
Telephone No:	
Email:	
Backup Contact Person at all times:	
Name/Title:	
Telephone No:	
Email:	

## 2.2 No obligation to make an offer

The Reserve Provider is not obliged to respond to a Request for Tender and offer the reserve to AEMO if the Request for Tender relates to a request for reserve during the following periods:

Date	Time

# 3 Description of Reserve

The *reserve* is comprised of *load reduction* at the locations and in the amounts detailed in the following table:

	Name of Consumer	Location of Reserve	Firm Capacity	Market Capacity	Reserve	Firm Capacity	Market Capacity	Reserve
			(MW) (7 am – 10 pm EST weekdays)	(MW) (7 am – 10 pm EST weekdays)	(Firm Capacity – Market Capacity) (MW) (7 am – 10 pm EST weekdays)	(MW) (7 am – 10 pm EST weekend days)	(MW) (7 am – 10 pm EST weekend days)	(Firm Capacity – Market Capacity) (MW) (7 am – 10 pm EST weekend days)
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								

Total Reserve MW
------------------

### 4 Characteristics of Reserve

Pre-activation lead time	Hours
Activation lead time	Hours
De-activation lead time	Hours
<b>Maximum continuous operation</b> ie the maximum time the <i>reserve</i> can be <i>activated</i> continuously.	Hours
<b>Minimum continuous operation</b> ie "the minimum time the <i>reserve</i> can be <i>activated</i> continuously.	Hours
For the avoidance of doubt, AEMO may issue an instruction to de- activate the reserve while the reserve is within the minimum continuous operation so that the de-activation lead time and minimum continuous operation are satisfied concurrently at the end of the minimum continuous operation.	
Minimum time between activations	Hours
Hours of the day the reserve is available for activation	
Days of the week the reserve is available for activation	
Maximum number of consecutive days the <i>reserve</i> can be <i>activated</i> in a week	
Maximum number of days per week of activation	
Maximum number of activations over the term	
Other activation constraints	

### 5 Not used

### 6 Contracted Levels of Performance

The *contracted levels of performance* comprise the provision of *load reduction* up to the total *reserve* that conforms to the following requirements:

#### 6.1 Minimum Technical Requirements

- (a) The *reserve* must be capable of being *activated* by *instructions* to a single point of contact with operational responsibility for the *reserve*;
- (b) The *reserve* must be capable of being *activated* as a *block* of not less than 10 MW, which may be made up of smaller components that are managed by the *Reserve Provider*,
- (c) The reserve must capable of remaining activated for at least 1 hour; and
- (d) Each connection point for the reserve must have a type 1, 2, 3 or 4 metering installation as required by Schedule 7.2 of the Rules or a Vic AMI meter to measure the electrical output or change in electrical consumption as a result of activation.

#### 6.2 **Performance Criteria**

The Reserve Provider must be capable of:

- (a) upon receiving from *AEMO* a *pre-activation instruction*, preparing the *reserve* for *activation* within the *pre-activation lead time*;
- (b) upon receiving from AEMO an activation instruction, activating the reserve within the activation lead time;
- (c) upon receiving a de-activation instruction from AEMO, de-activating within the deactivation lead time; and
- (d) delivering at least 80% of the quantity of *reserve* specified in the *reserve* contract during each *trading interval* covered by an *activation instruction*.

No part of the *reserve* shall be *activated* prior to receipt of a relevant *activation instruction* without *AEMO*'s prior consent.

Activation of the reserve must not lead to any consequent increase in the rate at which electricity is taken from the *network* by any other equipment or process owned by a *consumer* unless this effect has been deducted from the *reserve*.

#### 6.3 Availability Notification by the Reserve Provider

At all times during a reserve contract, the Reserve Provider must notify AEMO of the quantity of reserve (MW) available.

The Reserve Provider must notify AEMO of the quantity of reserve available by specifying the quantity of reserve available (MW) in the Web Portal. The quantity specified by the Reserve Provider must not exceed the quantity specified in the reserve contract.

If the Reserve Provider becomes aware of a material change of circumstances following the entry into a reserve contract, the Reserve Provider must as soon as practicable after becoming aware of it advise AEMO.

# 7 Requests for Provision of Reserve

### 7.1 What AEMO may Request

Subject to any advice from the Reserve Provider that the reserve is not available, at any time during a reserve contract, AEMO may request any load reduction between the market capacity and firm capacity.

#### 7.2 Method of Requests

*Instructions* will be given by telephone, which *AEMO* will record in accordance with Rule 4.11.4, or such other method as notified by AEMO.

#### 7.3 Contact Persons for Operational Purposes

Subject to clause 17.1(b), *instructions* will be given and received and communications concerning *instructions* must be made by the following persons on behalf of each party:

AEMO		
Contact Person at all times:		
Name/Title:	Control Room Operator on shift	
Telephone No:		
Email:		
Reserve Provider		
Contact Person at all times:		

Name/Title:	
Telephone No:	
Email:	
Backup Contact Person at all times:	
Name/Title:	
Telephone No:	
Email:	

#### 7.4 Pre-Activation Instruction

Subject to any activation constraints, AEMO may issue a pre-activation instruction at any time during a reserve contract requiring the Reserve Provider to prepare reserve for activation. A pre-activation instruction must specify:

- (a) the proposed activation start time (taking into account the activation lead time) and the proposed activation end time (taking into account the de-activation lead time); and
- (b) the amount of *reserve* (in MWh) that the *Reserve Provider* must prepare for *activation* for each *trading interval*.

For a *load reduction* with a *pre-activation lead time* of zero, a *pre-activation instruction* will not be required and the *load reduction* shall be taken to be constantly in a state of readiness to act on an *activation instruction* issued by *AEMO*.

The issue of a *pre-activation instruction* does not imply that an *activation instruction* will be issued.

#### 7.5 Activation Instruction

Subject to any activation constraints, AEMO may issue an activation instruction to the Reserve Provider at any time during a reserve contract requesting the Reserve Provider to activate, vary or de-activate the reserve. The activation instruction must specify:

- (a) the activation start time (taking into account the activation lead time) and the activation end time (taking into account the de-activation lead time); and
- (b) the amount of reserve the Reserve Provider must activate for each trading interval from the activation start time to the activation end time (in MWh), which unless agreed otherwise between the parties, must not be greater than the level specified in the relevant Day Ahead Availability Notice for that reserve and trading interval.

The Reserve Provider must comply with an activation instruction that complies with these requirements.

### 7.6 Terminating activation instruction

- (a) At any time prior to the activation start time (taking into account the activation lead time) specified in an activation instruction AEMO may issue an instruction to the Reserve Provider terminating that activation instruction if AEMO acting reasonably, considers that the reserve to be provided pursuant to that activation instruction is not required.
- (b) Taking into account the *activation lead time*, the *Reserve Provider* must comply with an *instruction* under (a).

### 8 Measurement and Verification

#### 8.1 Measurement

Measurement of any *reserve activated* under this Agreement will be in accordance with the following:

- (a) Actual *interval metering data* (not estimated metering data or substituted metering data) will be used to determine the quantity of load reduction.
- (b) The Reserve Provider must provide to AEMO a list of NMI's and datastream suffixes used to provide reserve under a reserve contract within 2 business days after activation.
- (c) The *NMI*'s and *datastreams* provided in the list by the *Reserve Provider* must only be *NMI*'s and *datastreams* that were notified to *AEMO* by the *Reserve Provider* prior to the *NMI Notification Date*.
- (d) The NMI's and datastream suffixes provided by the Reserve Provider to AEMO
  - be NMI's and datastream suffixes in the Market Settlement and Transfer Solutions (MSATS) system; and
  - have actual interval metering data (not estimated metering data or substituted metering data) for all trading intervals for at least 100 calendar days prior to [day/weekday] on which reserve was activated and for the period of activation.
- (e) Any relevant metering installation must be installed by a Metering Provider, and data collected by an AEMO accredited Metering Data Provider (category MDP 1-4 or, in respect of *Vic AMI meters*, such category accredited by AEMO entitled to collect data for *Vic AMI meters*).
- (f) The maximum level at which *reserve* is taken to have been *activated* is the level specified in a relevant *activation instruction*.

#### 8.2 **Verification**

Verification of the measurement of any *reserve activated* under this Agreement will be in accordance with the following:

- (a) AEMO's market systems, metering systems and energy management systems will be used to verify the quantity of reserve activated under a reserve contract.
- (b) The Reserve Provider will not be paid the usage charge in relation to reserve provided by a NMI that is also included as a NMI in a list by another reserve provider. AEMO will notify the Reserve Provider of any NMI included in a list provided by the Reserve Provider which is included in a list by another reserve provider.
- (c) The Reserve Provider will only be entitled to be paid a usage charge in relation to reserve provided by NMIs that were notified to AEMO by the Reserve Provider prior to the NMI Notification Date.
- (d) If AEMO requests further information relating to the measurement and determination of the activated reserve, the Reserve Provider must provide that information to AEMO within 2 business days of AEMO's request.

#### 8.3 Calculation

The calculation of the quantity of *reserve activated* under this Agreement will be in accordance with the following:

The aggregated electricity demand of all *NMI*'s and *datastreams* in the list provided by the *Reserve Provider* to *AEMO* after *activation* will be used to calculate the baseline and the amount of *reserve activated*. Baselines and *reserve activated* will not be calculated for individual *NMIs* and *datastreams*.

#### Unadjusted baseline calculation

$$b_t = \frac{1}{S} \sum_{i=1,2,...S} c_{ti}$$

Where:

b = unadjusted baseline MWh for a given time interval (t)

i = one of S selected days

S = the set of selected days in the 100 calendar days immediately preceding the [day/weekday] on which reserve was activated and for which the calculation is being made (the **45 day period**). The days in the 45 day period selected for the set will be based on [day/weekdays] on which reserve was not activated (Non-Activated Days) and [day/weekdays] on which reserve was activated (Activated Days) determined as follows:

Step 1 - This set of selected days will normally comprise the 10 Non-Activated Days immediately preceding the [day/weekday] on which reserve was activated and for which the calculation is being made.

Step 2 - If, in the 45 day period, there are less than 10 Non-Activated Days but 5 or more Non-Activated Days, then S comprises those Non-Activated Days.

Step 3 - If, in the 45 day period, there are less than 5 Non-Activated Days, then S comprises the Non-Activated Days plus one or more of the Activated Days in the 45 day period will added to the number of Non-Activated Days so that the total number of days in the set equals 5. The Activated Days added to the Non-Activated Days will be determined based on the level of demand during the *trading intervals* during the period of *activation* on the Activated Days (with the Activated Day with the highest demand during any *trading interval* during the period of *activation* on that Activated Day ranked highest and added to the Non-Activated Days, with the next highest ranked Activated Day added and so on, until the total number of days in the set equals 5). If 2 or more Activated Days are ranked the same based on the highest demand during any *trading interval* during the period of *activation*, the Activated Day closest in time to the [day/weekday] on which *reserve* was *activated* and for which the calculation is being made will be ranked higher.

t = trading interval.

c = MWh electricity demand for a given *trading interval* (t) occurring on one of the selected days i.

#### Relative Root Mean Squared Error (RRMSE)

AEMO may measure the accuracy of the unadjusted baseline by determining the unadjusted baseline's relative root mean squared error (RRMSE) by comparing the Reserve Provider's unadjusted baseline against the [100] days not being Activated Days immediately preceding the [day/weekday] on which reserve was activated and for which the calculation is being made and if they vary from each other by a value greater than or equal to [20%], AEMO may adjust the variables which are used to determine the unadjusted baseline to ones which AEMO determines, acting reasonably, more accurately reflects the Reserve Provider's typical demand.

The RRMSE is calculated as follows:

$$RRMSE = \frac{\sqrt{\sum_{n \in N} (L_n^{baseline} - L_n^{actual})^2}}{\frac{1}{N} \times \sum_{n \in N} L_n^{actual}}$$

Where:

- n is the set of *trading intervals* from which *metering data* is taken for the of the calculation.
- N is the number of elements in set n
- $L_n^{baseline}$  is the calculated baseline load associated with a *trading interval* in set n.
- $L_n^{actual}$  is the actual metered load associated with a *trading interval* in set *n*.

#### Adjustment factor calculation

$$a = \frac{\sum_{t=s-8}^{t=s-3} (c_t - b_t)}{6}$$

Where:

a = adjustment factor (this may be positive or negative)

s = the start of the *trading interval* (t) during which the *reserve* has been *activated* and for which the calculation is being made.

c = MWh electricity demand for a given time interval (t) during the period of *reserve* activation for which the calculation is being made.

s-n = trading interval n 30-min intervals before activation start time

If the adjustment factor is a positive amount, the adjustment factor is limited to an amount equivalent to 20% of the amount of the *reserve*.

If the *reserve* is *activated* for 2 or more separate periods on the same day, the adjustment factor *a* for each period of *activation* will be the adjustment factor calculated for the first period of *activation* on that day.

#### Adjusted baseline calculation

$$B_t = b_t + a$$

B = adjusted baseline MWh for a given time interval (t)

#### Delivered reserve

$$D_t = B_t - c_t$$

D = quantity of reserve activated for a given time interval (t)

Where D is more than the level specified in the relevant *activation instruction*, D = the level specified in the relevant *activation instruction*.

Where D is less than zero, D = 0.

# 9 Charges

#### 9.1 Billing Period

Subject to **item 8**, for For each *billing period*, the *Reserve Provider* will be entitled to charge *AEMO*:

- (a) a pre-activation charge equal to product of \$XX and the number of times a pre-activation instruction (not including instructions amending previous instructions) is given during the billing period; and
- (b) subject to the reserve being available if activated for the [day/weekday] for which the pre-activation charge relates, where reserve has been activated during a trading interval in accordance with a reserve contract during the billing period, a usage charge equal to the product \$xx and the quantity (in MWh) of the reserve activated as measured, verified and calculated in accordance with the relevant reserve contract.

Not more than one *pre-activation charge* is payable in a 24 hour period.

#### 9.2 Adjustment to charges

- (a) If, in respect of an activation instruction, either:
  - (i) the Reserve Provider has not activated the reserve in accordance with an activation instruction by the activation start time and, prior to the Reserve Provider activating the reserve but after the activation start time, AEMO has initiated involuntary load shedding; or
  - (ii) the Reserve Provider has not activated the reserve within 10 minutes of the activation start time (irrespective of whether or not AEMO has initiated involuntary load shedding); or
  - (iii) the Reserve Provider activates the reserve before the activation start time or within 10 minutes of the activation start time but does not then keep the reserve activated in full until the activation end time (or any earlier time if AEMO has instructed, or consented to, the Reserve Provider de-activating the reserve prior to the activation end time); or

(iv) the Reserve Provider was already offline when AEMO issued the preactivation instruction.

then the Reserve Provider is not entitled to any pre-activation charge in respect of the reserve contract (and the pre-activation charge associated with that reserve contract will be \$0).

- (b) If the Reserve Provider has not activated the reserve in the amount required in the activation instruction:
  - (i) within 10 minutes of the activation start time; or
  - (ii) AEMO has initiated involuntary load shedding between the *activation* start time and the *activation* in the amount required in the *activation* instruction.

then the *pre-activation charge* payable in respect of that *reserve contract* will be determined as follows:

$$A = B \times (C / D MW)$$

where:

- A = the *pre-activation charge* payable in respect of that *reserve contract*;
- B = the *pre-activation charge* that would otherwise have been payable under that reserve contract as determined in accordance with **item 9.1(a) above**; and
- C = the Firm Capacity (in MW) of any reserve which was activated by the Reserve Provider before the activation start time or within 10 minutes of the activation start time and prior to any involuntary load shedding by AEMO that was initiated after the activation start time, and that was then activated in full until the activation end time (or any earlier time if AEMO has instructed, or consented, to the Reserve Provider deactivating the reserve prior to the activation end time).
- D = the quantity of Reserve specified in a Request for Tender.
- (c) If the Reserve Provider has activated the reserve to a level that is no more than 80% of the amount required in the activation instruction, then the pre-activation charge payable in respect of that reserve contract will be determined as follows:

$$A = B \times (C / D MW)$$

where:

- A = the pre-activation charge payable in respect of that reserve contract;
- B = the *pre-activation charge* that would otherwise have been payable under that reserve contract as determined in accordance with **item 9.1(a) above**; and
- C = the Firm Capacity (in MW) of any reserve which was activated by the Reserve Provider before the activation start time or within 10 minutes of the activation start time and that was then activated in full until the activation end time (or any earlier time if AEMO has instructed, or

consented, to the Reserve Provider de-activating the reserve prior to the activation end time).

- D = the quantity of Reserve specified in a Request for Tender.
- (d) If the Reserve Provider offers to provide a quantity of reserve that is less than the quantity of Reserve specified in a Request for Tender, and AEMO accepts that offer, then the pre-activation charge payable in respect of the resulting reserve contract will be determined as follows:

 $E = F \times (G / H)$ 

#### where:

- E = the *pre-activation charge* payable in respect of that *reserve contract*;
- F = the *pre-activation charge* that would otherwise have been payable under that *reserve contract* as determined in accordance with item 9.1(a) above; and
- G = the aggregate Firm Capacity (in MW) of all reserve that is the subject of that reserve contract.
- H = the quantity of Reserve (in MW) specified in a Request for Tender.
- (e) The adjustments under this **Item 9.2** to a *pre-activation charge* do not affect any other provision of this Agreement, including the payment of the *usage charge* in respect of any *reserve* which is *activated* during a *Reserve Period*.
- (f) To the extent that:
  - (i) the adjustments under **Item 9.2(a)** applies and the adjustment under either or both of **Items 9.2(b)** and **(c)** also apply, only the adjustment under paragraph **(a)** is to be applied.
  - (ii) the adjustments under both of **Items 9.2(b)** and **(c)** apply, only the adjustment under **Item 9.2(c)** is to apply.

# **RERT Panel Agreement**

# Attachment 1 to Schedules 1 & 2 – Confirmation

[on AEMO letterhead]

To the Reserve Provider [name/address as per relevant Schedule]

#### Re | Confirmation of Reserve Contract

This is a Confirmation under clause XX of the RERT Panel Agreement dated xxx ("Agreement").

AEMO confirms your agreement to provide the following *reserve* for the following charges:

Period of reserve contract:	(AEMO will complete)
Date(s) reserve is available:	(AEMO will complete)
Time(s) reserve is available (EST):	(AEMO will complete)
Quantity of available reserve:	(AEMO will complete)
Location of available reserve:2	(AEMO will complete)

This *Confirmation* incorporates clauses 1 and 3 to 17 of the Agreement and any Schedule X, which collectively become a *reserve contract*.

Italicised terms are defined in the Agreement.

Dated:

Signed by XX in accordance with the Agreement.

Applicable only if the reserve relates to load reduction and reserve offered is not all of the load reduction described in the relevant schedule – delete this row if this applies and this footnote.

# Attachment 2 to Schedules 1 & 2 – Request for Tender

[on AEMO letterhead]

To the Reserve Provider [name/address as per relevant Schedule]

#### Re | Request for Tender

This is a *Request for Tender* under clause 3.2 of the RERT Panel Agreement dated xxx ("Agreement"). *AEMO* requests your tender for the provision of *reserve* as follows:

Date(s) reserve is required:	(AEMO will complete)
Time(s) reserve is required (EST):	(AEMO will complete)
Commencement and completion dates of proposed reserve contract:	(AEMO will complete)
Quantity of reserve required:	(AEMO will complete)
Location of reserve required:3	(AEMO will complete)

Your tender is required by XXam/pm<sup>4</sup> EDST on [ insert date ] on the form of tender attached. If you fail to submit a tender by this date and time, *AEMO* will assume that you do not wish to submit a tender.

Note that if your tender is accepted by *AEMO*, *AEMO* will send you a *Confirmation*, whereupon a reserve contract will be entered into that will incorporate the terms contained in the *Confirmation* and clauses 1 and 3 to 17 of the Agreement and Schedule X.

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Dated:

Signed by XX in accordance with the Agreement.

Applicable only if the reserve relates to load reduction and reserve offered is not all of the load reduction described in the relevant schedule – delete this row if this applies and this footnote.

<sup>&</sup>lt;sup>4</sup> Delete whichever is inapplicable.

# Attachment 3 to Schedules 1 & 2 – Form of Tender

[on Reserve Provider letterhead]

To AEMO[name/address as per relevant Schedule]:

# Re | Tender for the Provision of Reserve

In response to your Request for Tender dated xxx, we offer to provide the following reserve:

Date(s) reserve is available:	(Reserve Provider to complete)
Time(s) reserve is available (EST):	(Reserve Provider to complete)
Quantity of available reserve:	(Reserve Provider to complete)
Location of available reserve:5	(Reserve Provider to complete)

We confirm that the *reserve* being offered to *AEMO* is not already contracted for the period covered by this offer and will not otherwise be made available through *central dispatch*.

We also confirm that if our tender is accepted by *AEMO*, *AEMO* will send us a *Confirmation*, whereupon a *reserve contract* will be entered into that will incorporate the terms contained in the *Confirmation* and clauses 1 and 3 to 17 of the Agreement and Schedule X.

Italicised terms are defined in the Agreement.

Dated:

Signed by XX in accordance with the Agreement.

Applicable only if the reserve relates to load reduction and reserve offered is not all of the load reduction described in the relevant schedule – delete this row if this applies and this footnote.

# Signing page

SIGNED by XX as authorised representative for and on behalf of AUSTRALIAN ENERGY MARKET OPERATOR LIMITED in the presence of:	) ) ) ) )
Signature of witness	) ) )
Name of witness (block letters)	)
Address of witness	behalf of AUSTRALIAN ENERGY  MARKET OPERATOR LIMITED  )
Date signed:	
<b>SIGNED</b> by XX as authorised representative for and on behalf of <b>xxx</b> in the presence of:	) ) )
Signature of witness	) ) )
Name of witness (block letters)	) ) ) ) By executing this Agreement the signatory ) warrants that the signatory is duly
Address of witness	authorised to execute this Agreement on behalf of <b>xxx</b>
Date signed:	)