

Reliability and Emergency Reserve Trader (RERT) Guidelines

(under clauses 3.20.8 and 11.31.3 of the National Electricity Rules)

1 Interpretation

Italicised expressions in the *RERT guidelines* have the meaning given to that expression in the glossary in Chapter 10 of the National Electricity Rules (*Rules*).

For the avoidance of doubt, if any inconsistency arises between the Rules and the *RERT guidelines*, the *Rules* are to prevail.

2 Scope of the RERT guidelines

The *Reliability and Emergency Reserve Trader (RERT)* is a function conferred on AEMO to take all reasonable actions to ensure reliability of *supply* and where practicable, maintain *power system security* by negotiating and entering into contracts to secure the availability of *reserves* under *reserve contracts*.¹ AEMO must take the *RERT guidelines* into account (among other things) when exercising the *RERT*.²

The *Reliability Panel* must develop and *publish* the *RERT guidelines* for or with respect to:³

1. what information AEMO must take into account when deciding whether to exercise the *RERT*;
2. the relevance of the *RERT principles* to the exercise of the *RERT*;
3. the actions that AEMO may take to be satisfied that the *reserves* that are to be the subject of a *reserve contract* is not available to the *market* through any other arrangement;
4. the process AEMO should undertake in contracting for *reserves* including the process for tendering for contracts for such *reserves*;
5. the process AEMO should undertake in contracting for *reserves* in relation to long, medium and short-notice situations as described in the *RERT guidelines* to ensure reliability of supply and where practicable, maintain *power system security*;
6. any specific or additional assumptions about key parameters that AEMO must take into account in assessing the cost effectiveness of exercising the *RERT*;
7. matters relevant to AEMO managing a portfolio of *reserve contracts*; and

¹ Rule 3.20 of the *Rules*.

² Clause 3.20.7(f) of the *Rules*.

³ Clause 3.20.8(a) of the *Rules*.

8. additional forecasts that *AEMO* should take into account prior to exercising the *RERT*.

Sections 3 to 9 of this document set out the *RERT guidelines* developed by the *Reliability Panel*.⁴

3 Operation of the RERT

The operation of the *RERT* is divided into the following two stages:

1. Stage 1: when *AEMO* is determining whether to enter into contracts for the provision of additional *reserves* under clause 3.20.3; and
2. Stage 2: when *AEMO* is considering whether to *dispatch scheduled reserves* under *scheduled reserve contracts* or *activate unscheduled reserves* under *unscheduled reserve contracts* under clause 3.20.7.

4 Information that AEMO must take into account when deciding whether to exercise the RERT

AEMO should inform itself of the circumstances relating to reliability of *supply* when deciding whether to exercise the *RERT*. *AEMO* should consider the information set out further below at the two key stages in addition to generally monitoring this information.

4.1 During Stage 1 of the RERT process

- (a) Long-notice situations where *AEMO* determines it has more than ten weeks of notice of a projected shortfall in *reserves*.

When it is considering whether to enter into *reserve contracts* during Stage 1 of the *RERT* process, *AEMO* may take into account:

- the details of the outcome of the *medium term PASA*;
- the details of the drought studies prior to *AEMO* publishing the first *energy adequacy assessment projection (EAAP)* (due by 31 March 2010), and the outcome of the *EAAP* after the *publication* of the first *EAAP*⁵; and
- any other information that *AEMO* reasonably identifies to be necessary.

⁴ Developed in accordance with Clause 3.20.8 of the *Rules*.

⁵ In the *AEMC 2008, NEM Reliability Settings: Information, Safety Net and Directions, Final Rule Determination* (26 June 2008, Sydney), the Commission noted that while the *EAAP* will not be used to trigger *market* intervention by *AEMO*, the *EAAP* will provide an additional source of information to assist *AEMO* in assessing the likelihood of energy shortfalls in the *NEM*.

- (b) Medium-notice situations where *AEMO* has between ten weeks and seven days of notice of a projected shortfall in *reserves*.

When it is considering whether to enter into *reserve contracts* during Stage 1 of the *RERT* process for medium-notice situations, *AEMO* may take into account the information identified in (a) above.

- (c) Short-notice situations where *AEMO* has between three hours and seven days of notice of a projected shortfall in *reserves*.

When it is considering whether to enter into *reserve contracts* during Stage 1 of the *RERT* process for short-notice situations, *AEMO* may take into account:

- the details of the outcome of the *short term PASA* and *pre-dispatch* processes; and
- any other information that *AEMO* reasonably identifies to be necessary

4.2 During Stage 2 of the RERT process

During Stage 2 of the *RERT* process, *AEMO* may review the information it took into account during Stage 1 and also consider for the *period* where *reserves* may be required to ensure reliability of *supply* and where practical, maintain *power system security*:

- the details of the outcome of the *short term PASA*;
- the details of the *pre-dispatch schedule* in terms of the anticipated available *reserves*; and
- any other information that *AEMO* reasonably identifies to be necessary.

5 Relevance of the RERT principles to the exercise of the RERT

Clause 3.20.2(b) of the *Rules* identifies two principles referred to as the *RERT principles* which *AEMO* must have regard to in exercising the *RERT*. These principles are:

1. actions taken to be those which *AEMO* reasonably expects, acting reasonably to have the least distortionary effect on the operation of the *market*; and
2. actions taken should aim to maximise the effectiveness of *reserve contracts* at the least cost to end use consumers of electricity.

5.1 Actions to have the least distortionary effect on the operation of the market

When exercising the *RERT*, actions should be taken which *AEMO* reasonably expects to have the least distortionary effect on the operation of the *market*, both in relation to the short term impact on the *spot prices* and the long term impact on investment signals. In determining the action to take, *AEMO* must consider:

- how it tenders and contracts for *reserves*; and
- in relation to *scheduled reserve contracts* and subject to clauses 3.9.3©) and (d) of the *Rules*, setting the *dispatch price* and *ancillary service prices* for an *intervention price dispatch interval* at a value which AEMO, in its reasonable opinion, considers would have applied had the *AEMO intervention event* not occurred.

The considerations above aim to reduce the distortionary impacts from AEMO intervening in the *market* to respond to a projected shortfall in *reserves*, and preserve *market* signals to foster a *market* response to those projected shortfalls. It provides an appropriate balance between allowing *market* responses to projected shortfalls to develop and providing a temporary mechanism to maintain the reliability of *supply* and where practicable, *power system security*.

5.2 Actions to maximise the effectiveness of reserve contracts at the least cost to end use consumers of electricity

Any consideration of the cost effectiveness of exercising the *RERT* must be done by AEMO in consultation with the relevant *participating jurisdictions* in accordance with clause 3.20.3 of the *Rules*.⁶ The factors that would be relevant to this consideration and consultation include:

- the cost for stages 1 and 2 (as defined in section 3 of these guidelines) of the *reserve contracts* for the amount of *reserves* delivered;
- what extra payment is required to be made if the contracted *reserves* are actually *dispatched* or *activated*;
- any penalty costs that AEMO would need to pay if it terminates an existing contract early (this is unlikely to apply in short-notice situations);
- the nature of the *reserves* being offered including:
 - how firm the capacity is;
 - the minimum and maximum time the *scheduled reserves* could be *dispatched* under *scheduled reserve contracts* or *unscheduled reserves activated* under *unscheduled reserve contracts*; and
 - how much notice is required to *dispatch* a particular *scheduled reserve* under a *scheduled reserve contract* or *activate* an *unscheduled reserve* under an *unscheduled reserve contract*. For example, some *loads* require twenty four hours of notice so they can adjust the timing of processes, while others may only require a few hours;
- the duration of the projected capacity shortfall;

⁶ Note that for short-notice situations consultation with the *participating jurisdictions* would be limited to that outlined in section 8.3.

- the size of the projected capacity shortfall, in megawatts (MW); and
- the likelihood of the proposed capacity shortfall being resolved.

Where AEMO has *reserve contracts* in place to meet a projected shortfall in *reserves*, and there is more than ten weeks of notice of a material increase in the shortfall, it may conduct additional rounds of full tendering (rolling tenders) in order to achieve the optimal contract portfolio in accordance with the *RERT principles*, which may result in the execution of new *reserve contracts* or the early termination of existing *reserve contracts*.

Under some circumstances AEMO will be required to *dispatch* or *activate reserves* that are contracted under the long-notice or medium-notice situations as well as contracting with additional *reserves* under the short-notice situations. Under these circumstances AEMO should aim to maximise the effectiveness of *reserve contracts* at the least cost to end use consumers of electricity by selecting the least cost combination of *reserves* contracted under the long, medium and short-notice situations. However, where AEMO has only a few hours notice of a *reserve* shortfall it may have insufficient time to determine the least cost combination of *reserves*. In which case AEMO should *dispatch* or *activate* its long-notice and medium-notice *reserve contracts* ahead of contracting for further *reserves* using the short-notice *RERT*. Nevertheless, where AEMO has sufficient time to perform the necessary analysis it should aim to maximise the cost effectiveness of the *RERT* by selecting the combination of *reserve contracts* that has the lowest incremental cost.

6 AEMO's use of a RERT panel

Explanatory note

The Panel's initial set of *RERT* guidelines that were published in November 2008 did not support AEMO forming a panel of potential suppliers of contracted *reserves*. AEMO was concerned because in its final Rule determination the AEMC indicated that it considered that the use of a panel may restrict competition and a full tender process should be used.⁷ However, the Panel considers that it is beneficial to clarify that AEMO may use a *RERT* panel to increase its flexibility when contracting for *reserves*, but AEMO is expected to use the full tender process when more than ten weeks of notice of a projected shortfall in *reserves* exists. The Panel understands that AEMO anticipates that it will take between eight and sixteen weeks for entities to be accredited onto the *RERT* panel, but may be expedited (to a minimum of four weeks) if there is a projected shortfall in *reserves*.

⁷ The AEMC 2008, *NEM Reliability Settings: Information, Safety Net and Directions*, Final Rule Determination (26 June 2008, Sydney) is available on the AEMC website

6.1 Constitution of the RERT panel

AEMO may form a *RERT* panel of entities that may be called upon to tender for, and enter into, a contract for *reserves* for medium-notice situations where there is between ten weeks and seven days of notice and short-notice situations of between three hours and seven days of notice of a projected shortfall in *reserves*. The process for submitting expressions of interest for the medium-notice and short-notice *RERT* differ significantly with each process outlined in sections 6.3 and 6.4 of the *RERT guidelines*.

AEMO should:

- inform the market before it forms the *RERT panel* and when it commences negotiations for *reserves contracts*;
- operate the *RERT* panel on a continuous basis and periodically open the *RERT* panel for new members; and
- treat information on the *RERT* panel membership as confidential information.

Members of the *RERT* panel:

- would negotiate and agree with *AEMO* on technical and legal requirements in sufficient detail for them to be able to enter into *reserve contracts* if *AEMO* uses the *RERT* with less than ten weeks notice of a projected shortfall in *reserves*;
- do not recover any payments from *AEMO* for being a member of the *RERT* panel;
- are free to contract their capacity with other parties, including *Market Participants*; and
- should advise *AEMO* if their *reserves* are not available to be contracted under the *RERT* at any time over the next twelve months, including due to the fact that it is already contracted to other parties.

When *AEMO* makes a decision to contract for *reserves* with between three hours and seven days of notice of a projected shortfall in *reserves*, then it would *publish* to all eligible members of the *RERT* panel (that is, those with *reserves* in the associated *region* that can be *dispatched* or *activated* within the period of *reserve* shortfall) a schedule of the requirements and request members to confirm by a set deadline:

- the availability of the service for the period covered by the schedule (capacity and minimum/maximum usage times etc);
- the required enablement time;
- confirmation that the service is not already contracted for the period covered by the schedule.

Based on this information *AEMO* would then determine, in accordance with the *RERT principles*, which services should be procured to meet the schedule of requirements and

would then contract with these selected *RERT* panel members on the basis of the standard terms and conditions of the short-notice *reserve contract*.

6.2 Operation of the RERT panel in long-notice situations (more than ten weeks of notice)

The Panel considers that *AEMO* should not rely exclusively on the *RERT* panel when it has more than ten weeks notice of a projected shortfall in *reserves*. Under these circumstances, *AEMO* is expected to use the full tender process, which should include requesting tender responses from both members of the *RERT* panel and other potential *reserve* providers.

6.3 Operation of the RERT panel for medium-notice situations (between seven days and ten weeks of notice)

The Panel considers that *AEMO* may operate a *RERT* panel for situations with between seven days and ten weeks of notice of a projected shortfall in *reserves*, and would need to develop a standard form of *reserve contract* for use in these situations.

The Panel considers that the expressions of interest from entities that wish to be members of the *RERT* panel for medium-notice situations should conform to the standard form of *reserve contract*.

These expressions of interest should include:

- the location of the service;
- the likely available capacity;
- the minimum and/or maximum period for which the offered service is likely to be continuously available;
- the enablement time required prior to actual usage;
- any period in the next twelve months during which the service would be unavailable due to the fact that it is already contracted to other parties;
- an estimate of the likelihood that the service would be available if the *RERT* panel member was advised of a requirement within between seven days and ten weeks of notice;
- twenty four hour contact details; and
- an undertaking to advise *AEMO* of changes of any of the above details as soon as reasonably practical after the *RERT* panel member becomes aware of the change.

6.4 Operation of the RERT panel in short-notice situations (between three hours and seven days of notice)

The Panel considers that, in addition to the requirements in sections 6.1 to 6.3, for situations with between three hours and seven days of notice of a projected shortfall in *reserves*:

- *AEMO* would need to develop a standard form of *reserve contract*; and
- members of the *RERT* panel that are interested in providing *reserves* with less than seven days of notice will be required to provide *AEMO* with confirmation of the location and availability of their *reserves*.

The Panel considers that the expressions of interest from entities that wish to be members of the *RERT* panel for short-notice situations should include:

- the location of the service;
- the likely available capacity;
- the minimum and/or maximum period for which the offered service is likely to be continuously available;
- the enablement time required prior to actual usage;
- the enablement and usage price for the service;
- any period in the next twelve months during which the services would be unavailable due to the fact that it is already contracted to other parties;
- an estimate of the likelihood that the service would be available if the *RERT* panel member was advised of a requirement with less than seven days of notice;
- twenty four hour contact details; and
- an undertaking to advise *AEMO* of changes of any of the above details as soon as reasonably practical after the *RERT* panel member becomes aware of the change.

Entities that wish to be members of the *RERT* panel for short-notice situations should submit an expression of interest that conforms to the standard form of short-notice *reserve contract*, thus indicating their willingness to participate in an expedited provision of *reserves* if called upon by *AEMO* with less than seven days of notice.

In short-notice situations of between three hours and seven days of notice of a projected shortfall in *reserves*, *AEMO* may decide to only consider *reserve* offers from *RERT* panel members that agreed to participate in an expedited process and submitted complying *reserve* offers, including short-notice enablement and usage prices.

7 Actions that AEMO may take to be satisfied that the reserve that is to be the subject of a reserve contract is not available to the market through any other arrangement

AEMO must take steps to inform itself that the *reserves* that are to be the subject of a *reserve contract* between *AEMO* and a party is not available to the *market* through any other arrangements.

7.1 Situations of more than seven days of notice

In situations where there is more than seven days of notice of a projected shortfall in *reserves*, the steps which *AEMO* may take to inform itself if the *reserves* are not the subject of any other arrangements include:

- requiring a tenderer⁸ at the initial tender stage for *reserve contracts* to enter into an undertaking with *AEMO* which states that the *reserve* is not available to the *market* through any other arrangement;
- making reasonable enquiries in the *market*;
- assessing any information that is available to *AEMO* and relevant to whether the *reserves* are available to the *market* through any other arrangement; and
- improving *AEMO*'s measures when it develops its *RERT procedures* to reduce the likelihood that *AEMO* will enter into a *reserve contract* with a party who had made the *reserves*, the subject of the *reserve contract*, available to the *market* through any other arrangements.⁹

7.2 Short-notice situations with between three hours and seven days of notice

In short-notice situations, with between three hours and seven days of notice of a projected shortfall in *reserves*, the steps that *AEMO* may take to inform itself if the *reserves* are not the subject of other arrangements should include:

- requesting a member of the *RERT* panel to inform *AEMO* when the *reserves* for which the expression of interest related to are no longer available to the *market* as a result of another arrangement; and
- prior to contracting of *reserves*, *AEMO* should confirm with the *RERT* panel members that the *reserves* for which their expression of interest relates are not available to the *market* as a result of another arrangement; and

⁸ A tenderer means a prospective party to a reserve contract.

⁹ *AEMO* is required to take into account the *RERT guidelines* when it develops its *RERT procedures* in accordance with clause 3.20.7(e).

- after contracting of *reserves*, AEMO should assess any information that is available to it and relevant to whether the *reserves* are available to the *market* through any other arrangement.

AEMO's *RERT procedures* should consider what measures are necessary to reduce the likelihood that AEMO will enter into a *reserve contract* with a party who has made the *reserves*, the subject of the *reserve contract*, available to the *market* through any other arrangements.¹⁰

8 Process for contracting for reserve including the tender and RERT panel processes for reserve contracts

Under clause 11.31.4 of the *Rules*, before AEMO *publishes* its final procedures for the exercise of the *RERT* (due by 30 November 2010), it may develop, *publish*, and may amend from time to time, interim procedures for the exercise of the *RERT* without the need to follow the *Rules consultation procedures*. However, amendments to the final procedures must be undertaken in accordance with clause 3.20.7(e) of the *Rules*, that states AEMO must develop, *publish*, and may amend from time to time, in accordance with the *Rules consultation procedures*, procedures for the exercise of the *RERT* that take into account the *RERT principles* and the *RERT guidelines*.

8.1 Process for contracting for reserves for reserve contracts with more than ten weeks of notice

The relevant actions that AEMO may take in relation to the exercise of the *RERT* with more than ten weeks of notice of a projected shortfall in *reserves* include:

- establishing arrangements for contracting *reserves* in situations where there is more than ten weeks of notice of a projected shortfall in *reserves*;
- continually monitoring the *medium term PASA* and the *EAAP*, and any other information AEMO considers is relevant, to inform itself of any periods of *low reserves*;
- determining whether to enter into *reserve contracts*;
- consulting with persons nominated by the relevant *participating jurisdictions* which AEMO is determining whether to contract for *reserves* in;
- calling for tenders in relation to providing *reserves* in the respective *regions* or in some circumstances, combined *regions*;
- evaluating the tenders and dispensing with any tenders that do not provide an undertaking that the *reserves* are not available to the market through any other arrangements except on terms agreed with AEMO, taking into account:

¹⁰ AEMO is required to take into account the *RERT guidelines* when it develops its *RERT procedures* in accordance with clause 3.20.7(e).

- whether the commercial requirements are met;
 - whether the tender is credible, that is, whether it is likely that the tenderer can deliver the offered *reserves*; and
 - the optimal combination of contracts to deliver the *reserves* necessary to meet the shortfall;
- selecting the tenders that AEMO considers to be the optimal portfolio of *reserve contracts*;
 - monitoring the *medium term PASA* and the *EAAP* to determine if there have been any changes since the tenders were prepared and evaluated;
 - giving consideration to including an early termination clause in the event that the capacity is not needed; and
 - within one month after entering into a contract for *reserves*, publish the name of the counterparty to the contract and the volume and timing of *reserves* procured under the contract.

8.2 Process for contracting for reserves for reserve contracts with between seven days and ten weeks of notice

The relevant actions that AEMO may take in relation to the exercise of the RERT with between seven days and ten weeks of notice of a projected shortfall in *reserves* include:

- establishing arrangements for contracting for *reserves* in situations where there is between seven days and ten weeks of notice of a projected shortfall in *reserves*;
- continually monitoring the *medium term PASA* and the *EAAP*, and any other information AEMO considers is relevant, to inform itself of any periods of *low reserves*;
- determining whether to enter into *reserve contracts*;
- consulting with persons nominated by the relevant *participating jurisdictions* which AEMO is determining whether to contract for *reserves* in;
- notifying RERT panel members in relation to providing *reserves* in the respective *regions* or in some circumstances, combined *regions*; and
- evaluating the *reserve offers* from RERT panel members and dispensing with any *reserve offers* that do not provide an undertaking that the *reserves* are not available to the *market* through any other arrangements except on terms agreed with AEMO, taking into account the optimal combination of contracts to deliver the *reserves* necessary to meet the shortfall.

Following contracting of *reserves*, the actions that *AEMO* may take includes:

- selecting the *reserve* offers that *AEMO* considers to be the optimal portfolio of *reserve contracts*;
- monitoring the *medium term PASA* and the *EAAP* to determine if there have been any changes since the *reserve* offers were prepared and evaluated;
- giving consideration to including an early termination clause in the event that the capacity is not needed; and
- within one month after entering into a contract for *reserves*, publish the name of the counterparty to the contract and the volume and timing of *reserves* procured under the contract.

8.3 Process for contracting for reserves for reserve contracts in short-notice situations (between three hours and seven days of notice)

Explanatory note

The execution of short-notice *reserve* contracts would need to be a simplified process but it is likely to be more involved than a simple telephone call for reasons of prudence. Therefore execution of short-notice *reserve* contracts would require a minimum 3 hour response time.

The relevant actions that *AEMO* may take in relation to the exercise of the *RERT* for situations with between three hours and seven days of notice of a projected shortfall in *reserves*, as defined in clause 3.20.8(a)(6), include:

- establishing arrangements for contracting for *reserves* in situations where there is between three hours and seven days of notice of a projected shortfall in *reserves*;
- continually monitoring the *pre-dispatch schedule* and *short term PASA*, for periods of *low reserves* or *lack of reserve* (LOR2);
- determining whether to enter into *reserves contracts*;
- consulting in advance with the *participating jurisdictions*¹¹ to determine a maximum average price threshold (in \$/MWh) that *AEMO* should pay to *dispatch* or *activate reserve contracts* in the relevant region under the short-notice *RERT* (reflecting the opportunity cost of shedding customer load in that *region*);
- excluding in advance entities from the *RERT* panel for short-notice situations that have an average cost (in \$/MWh) that is greater than the maximum average price threshold approved by the respective *participating jurisdiction*;

¹¹ Given the reduced timeframe for the short-notice *RERT*, it would not be possible to fully consult with affected *participating jurisdictions* on all matters considered when executing the *reserve contracts*.

- agreeing in advance with the *participating jurisdiction* as to the cost sharing arrangements between *participating jurisdictions* in short-notice *reserve* shortfall situations;
- using a *RERT* panel arrangement to identify which panel members are technically able, on the basis of their expressions of interest, to provide *reserves* within the applicable notice period and in the required *regions* or in some circumstances, combined *regions*;
- contacting those eligible *RERT* panel members to confirm the quantity of *reserve* available and period for which it is available;
- evaluating the *reserve* offers from the eligible list of *RERT* panel members; and
- selecting the optimal portfolio of *reserve contracts* to meet a shortfall from the available expressions of interest using reasonable endeavours and subject to practical limitations including the extent of notice available of an impending reliability or *power system security* event.

Following contracting of *reserves*, the actions that *AEMO* may take includes:

- monitoring the *pre-dispatch schedule* and *short term PASA* to determine if there have been any changes to the relevant *reserve* requirements; and
- within one month after entering into a contract for *reserves*, publish the name of the counterparty to the contract and the volume and timing of *reserves* procured under the contract.

9 Use of contracted reserves for security events

AEMO may *dispatch* or *activate reserves* under *reserve contracts* to address a *power system security* event in a *transmission network* that it has oversight for if:

- there are suitable *reserves* that *AEMO* has contracted under the *RERT* for long or medium-notice situations at an appropriate location, and there is sufficient notice of the *power system security* event to allow *AEMO* to *dispatch* or *activate* these *reserves*; or
- there are suitable *reserves* that *AEMO* can contract under the *RERT* for short-notice situations at an appropriate location, and there is sufficient notice of the *power system security* event to allow *AEMO* to *dispatch* or *activate* these *reserves*.