Reliability Panel AEMC

FINAL GUIDELINES

RELIABILITY AND EMERGENCY RESERVE TRADER GUIDELINES

25 JULY 2019

INQUIRIES

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ABOUT THE RELIABILITY PANEL

The Panel is a specialist body established by the Australian Energy Market Commission (AEMC) in accordance with section 38 of the National Electricity Law and the National Electricity Rules. The Panel comprises industry and consumer representatives. It is responsible for monitoring, reviewing and reporting on reliability, security and safety on the national electricity system, and advising the AEMC in respect of such matters.

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1 INTERPRETATION

These *RERT guidelines* are made under clause 11.115.2 of the National Electricity Rules (*Rules*) and commence on 26 March 2020.

Italicised expressions in the *RERT guidelines* have the meaning given to that expression in the glossary in Chapter 10 of the *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* by negotiating and entering into contracts to secure the availability of *reserves* under *reserve contracts*. AEMO must take the *RERT guidelines* into account (among other things) when exercising the *RERT*.

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* are 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 different notice situations, as described in the *RERT guidelines*, to ensure reliability of supply;
- 6. the process *AEMO* should undertake in contracting for *reserves* in relation to the different types of declarations made under clause 4.8.4 to ensure reliability of *supply*;
- 7. any specific or additional assumptions about key parameters that *AEMO* must take into account in assessing the cost effectiveness of exercising the *RERT*;
- 8. the information, assumptions and parameters *AEMO* must take into account when determining the estimated average VCRs, and the application of those estimated average VCRs for the purposes of the *RERT principle* in clause 3.20.2(b)(3);
- 9. matters relevant to AEMO managing a portfolio of reserve contracts; and
- 10. 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

Explanatory note - Definition of Market

Consistent with the definition in clause 3.20.1(b) of the NER, references to market throughout these guidelines mean a *market* for the trading of *energy* only, and for the avoidance of doubt, does not include contractual or other arrangements for the provision of *ancillary services*.

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.

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

3 OPERATION OF THE RERT

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

- 1. Stage 1: when the procurement trigger has been met⁵ and *AEMO* is determining whether to enter into contracts for the provision of emergency *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.

⁵ In accordance with clause 3.20.3(f) of the NER.

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 (procurement)

(a) Long-notice situations where *AEMO* determines it has between 12 months and 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 for long-notice situations, *AEMO* must take into account the *low reserve* condition declared in accordance with clause 4.8.4 of the *NER* for a forecast breach of the reliability standard.

AEMO should use the latest available *low reserve* condition when entering into reserve contracts, unless it is not practicable to do so.

(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* must take into account the *low reserve* condition declared in accordance with clause 4.8.4 of the *NER* for a forecast breach of the reliability standard.

AEMO should use the latest available *low reserve* condition when entering into reserve contracts, unless it is not practicable to do so.

(c) Short-notice situations where *AEMO* has less than 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* must take into account the *lack of reserve* condition (such as a LOR2 or LOR3) declared in accordance with clause 4.8.4 of the *NER*.

AEMO should use the latest available *lack of reserve* condition when entering into *reserve* contracts, unless it is not practicable to do so.

4.2 During Stage 2 of the RERT process (dispatch or activation)

During Stage 2 of the *RERT* process, *AEMO* must 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* based on the *lack of reserve* condition (such as a LOR2 or LOR3) declared in accordance with clause 4.8.4 of the *NER*.

Use of contracted reserves for security events

AEMO may dispatch or activate reserves under reserve contracts to address a power system security event, if there are suitable reserves that AEMO has contracted under the RERT for long, medium or 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. For the avoidance of doubt, consistent with clause 3.20.7(a) of the NER, AEMO may dispatch or activate RERT for power system security purposes if emergency reserves have already been procured in accordance with clause 3.20.3 of the NER, but may not procure RERT for the purpose of meeting power system security requirements.

5 RELEVANCE OF THE RERT PRINCIPLES TO THE EXERCISE OF THE RERT

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

- actions taken are to be those which AEMO reasonably expects, acting reasonably to have the least distortionary effect on the operation of the market;
- 2. actions taken should aim to maximise the effectiveness of *reserve contracts* at the least cost to end use consumers of electricity; and
- 3. the average amount payable by *AEMO* under *reserve contracts* for each MWh of *reserves* for a *region* should not exceed the estimated average value of customer reliability (VCR) for that *region*.

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 seeks offers, and contracts, for reserves; and
- in relation to reserve contracts and subject to clauses 3.9.3(c) and (d) of the Rules, setting the dispatch price and ancillary service prices for an AEMO 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 last resort mechanism to maintain the reliability of *supply*.

When *AEMO* seeks reserve providers it must comply with the out-of-market provisions set out in clauses 3.20.3(g)-(l) of the *NER*. These provisions serve to minimise the distortionary effect of the *RERT* on the market. Under these provisions:

- Scheduled reserves cannot participate in RERT if they have been in the wholesale market in the 12 months preceding the date of execution of the reserve contract. Scheduled reserves also cannot participate in the wholesale market for the duration of the contract.
- *Unscheduled reserves* cannot participate in the wholesale market and in *RERT* for the *trading intervals* to which their contract relates.
- AEMO is required to clearly articulate how it will apply the out-of-market provision for unscheduled reserves.

The *RERT* reporting requirements established in clause 3.20.6 of the *NER*, improve transparency with respect to the volumes of *reserves* contracted and their associated costs as well as the reasons *reserves* were *dispatched* or *activated*. This may further reduce potential distortions associated with *AEMO's RERT* actions.

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 reserve contract costs ⁷ for stages 1 and 2 (as defined in section 3 of these guidelines);
- 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;
- 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 sufficient notice of a material increase in the shortfall, it may seek offers from *RERT* panel members and other potential *reserve* providers 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 for 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

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

⁷ Contractual costs may include availability, pre-activation and usage charges

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.

The Panel considers that should *AEMO* choose to standardise *RERT* products, it should only do so to the extent that standardisation does not lead to a material reduction in *RERT* providers or inefficient cost outcomes.

5.3 RERT costs should not exceed the estimated average VCR

In procuring emergency *reserves*, *AEMO* must have regard to the principle that the average amount payable under the terms and conditions of emergency *reserve* contracts should not exceed an estimated average VCR expressed on a \$/MWh basis, for each *region*.

This estimated average VCR, should, to the extent possible, reflect that *RERT* costs should not exceed the costs of load shedding. Therefore, in setting the estimated average VCR, *AEMO* should consider the following inputs where possible and relevant:

- Jurisdictional load shedding schedules.
- VCR values as calculated by the AER with AEMO determining which VCRs to use in a specific *region*, giving consideration, where possible, to:
 - the type (e.g. industrial or residential) and location (e.g. urban or rural) of consumers that are most likely to be load shed in a particular jurisdiction, in accordance with the jurisdictional load shedding schedules
 - The time periods (i.e. season and time of day) of a projected shortfall in *reserves* or when *load shedding* is likely to occur
 - Cost sharing arrangements.

AEMO should determine which of the AER's VCR figures it will apply for the purposes of the estimated average VCR (for that financial year) and publish these figures, as needed. For example:

- AEMO may determine the average VCR at the start of each financial year, to reflect how it operationalises the *reliability standard*.
- AEMO should update its estimated average VCR figure if the information that it has used to set the VCR changes, for example, if the AER updates its VCR figures.

In the event that *AEMO* seeks to determine the estimated average VCR prior to the AER calculating and publishing VCR figures, *AEMO* should refer to the figures it calculated as part of its 2014 VCR review.

6 AEMO'S USE OF A RERT PANEL

6.1 Constitution of the RERT panel

AEMO may form a RERT panel of entities that may be called upon to make *reserve* offers, 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 where there is less than 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
- subject to any decision by AEMO under section 8.1, 8.2 or 8.3 to publish relevant details following contracting of reserves, 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 less than 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*.

Operation of the RERT panel for long-notice situations (between 12 months and ten weeks of notice)

AEMO should not rely exclusively on the RERT panel when it has between 12 months' and ten weeks' notice of a projected shortfall in *reserves*. Under these circumstances, AEMO is expected use a 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 medium-notice *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;
- for unscheduled reserves, 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 (this does not apply for scheduled reserves);
- 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.

Operation of the RERT panel in short-notice situations (less than seven days of notice)

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

- AEMO would need to develop a standard form of short-notice 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;
- for unscheduled reserves, 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 (this
 does not apply for scheduled reserves);
- 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 with less than 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 COMPLIES WITH THE OUT OF MARKET PROVISIONS IN THE NER

The out-of-market provisions set out in clauses 3.20.3(g)-(l) of the NER differ in relation to scheduled and unscheduled reserves:

- AEMO must not enter contracts in relation to capacity of scheduled reserves for which
 dispatch offers or dispatch bids have been submitted or are considered by AEMO to be
 likely to be submitted or be otherwise available for dispatch at any time during:
 - the period from the date of execution of the scheduled reserve contract until the end of its term; and
 - the 12 month period immediately preceding the date of execution of the scheduled reserve contract, except where that capacity was dispatched under a reserve contract.
- AEMO may only enter into a scheduled reserve contract if the contract contains a
 provision that the other party to the contract has not and will not otherwise offer the
 reserve the subject of the contract in the market at any time during the period from the
 date of execution of that contract until the end of its term.
- AEMO may only enter into an unscheduled reserve contract if the contract contains a
 provision that the other party to the contract has not and will not otherwise offer the
 reserve the subject of the unscheduled reserve contract in the market for the trading
 intervals to which the contract with AEMO relates.

Additionally, in accordance with clause 3.20.7(e)(1) of the *NER*, in its *RERT* procedures *AEMO* must set out the methodology, information and assumptions that it used to satisfy itself that a provider of *unscheduled RERT reserves* has not offered these *reserves* to the market for the *trading interval* to which the *RERT* contract with *AEMO* relates.

7.1 Long-notice and medium-notice situations

In order to comply with the out-of-market provision noted above, in situations where there is between 12 months and seven days of notice of a projected shortfall in *reserves*, *AEMO* may take steps that include:

- requiring a prospective party to a reserve contract, at the initial 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 for:
 - *scheduled reserves,* the period from the date of execution of that contract until the end of its term
 - unscheduled reserves, the trading intervals to which the reserve contract with AEMO relates.

- 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 for:
 - *scheduled reserves,* the period from the date of execution of that contract until the end of its term
 - unscheduled reserves, the trading intervals to which the reserve contract with AEMO relates.
- 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 for:
 - scheduled reserves, the period from the date of execution of that contract until the end of its term
 - unscheduled reserves, the trading intervals to which the reserve contract with AEMO relates.⁸

7.2 Short-notice situations with less than seven days of notice

In order to comply with the out-of-market provisions noted above, in short-notice situations, with less than seven days of notice of a projected shortfall in reserves, AEMO may take steps that 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 for:
 - scheduled reserves, the period from the date of execution of that contract until the end of its term
 - unscheduled reserves, the trading intervals to which the reserve contract with AEMO relates
- 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, for:
 - *scheduled reserves,* the period from the date of execution of that contract until the end of its term
 - unscheduled reserves, the trading intervals to which the reserve contract with AEMO relates.

⁸ AEMO is required to take into account the RERT guidelines when it develops its RERT procedures in accordance with clause 3.20.7(e).

As set out in clause 3.20.7(e)(1) *AEMO* will set out in its *RERT procedures* the measures it will adopt in order to reduce the possibility that *generating units* or *loads* likely to be *activated* under *unscheduled reserve contracts* are otherwise engaged at the time the *unscheduled reserve contracts* are required to be *activated* by *AEMO*.

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8 PROCESS FOR CONTRACTING FOR RESERVE CONTRACTS

8.1 Process for contracting for reserve contracts in long-notice situations (between 12 months and ten weeks of notice)

The relevant actions that *AEMO* may take in relation to the exercise of the *RERT* with between 12 months and ten weeks of notice of a projected shortfall in *reserves* include:

- establishing arrangements for contracting *reserves* in situations where there is between 12 months and ten weeks of notice of a projected shortfall in *reserves*;
- determining whether to enter into reserve contracts following the declaration of a low reserve condition as defined by clause 4.8.4 of the NER for a forecast breach of the reliability standard⁹;
- consulting with persons nominated by the relevant *participating jurisdictions* which *AEMO* is determining whether to contract for *reserves* in those *participating jurisdictions*;
- calling for tenders in relation to providing *reserves* in the respective *regions* or in some circumstances, combined *regions*;
- dispensing with any tenders that do not provide an undertaking that :
 - scheduled reserves are not available to the market during the period from the date of execution of that contract until the end of its term
 - *unscheduled reserves* are not available to the market for the *trading intervals* to which the *reserve* contract with *AEMO* relates.
- evaluating the tenders taking into account:
 - 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;
- giving consideration to the estimated average VCR;
- selecting the tenders that AEMO considers to be the optimal portfolio of reserve contracts;
- giving consideration to including an early termination clause in the event that the capacity is not needed.

Following contracting of reserves, the actions that AEMO must take include:

monitoring any low reserve condition declarations

According to clause 4.8.4 of the NER, a low reserve condition is when AEMO considers that the balance of generation capacity and demand for the period being assessed does not meet the reliability standard as assessed in accordance with the reliability standard implementation guidelines.

 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.

Clauses 3.20.6 and 3.20.7 of the NER set out AEMO's reporting requirements in relation to the RERT.

Explanatory note - medium-notice situations

In medium-notice situations, AEMO may secure reserve contracts by seeking:

- reserve offers from RERT panel members; or
- *reserve* offers from *RERT* panel members and, at *AEMO's* discretion, offers from other potential reserve providers, which may include a tender process.¹⁰

8.2 Process for contracting for reserve contracts in medium-notice situations (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;
- determining whether to enter into reserve contracts following the declaration of a low reserve condition as defined by clause 4.8.4 of the NER for a forecast breach of the reliability standard;
- 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;
- calling for reserve offers from other potential reserve providers in relation to providing reserves in the respective regions or in some circumstances, combined regions;
- dispensing with any reserve offers that do not provide an undertaking that:
 - scheduled reserves are not available to the market during the period from the date of execution of that contract until the end of its term
 - *unscheduled reserves* are not available to the market for the *trading intervals* to which the *reserve* contract with *AEMO* relates.
- evaluating the reserve offers taking into account:
 - · whether the commercial requirements are met;
 - whether the *reserve* offer is credible, that is, whether it is likely that the *RERT* panel member or other potential *reserve* provider can deliver the offered *reserves*; and

¹⁰ AEMO may determine whether a tender process is open to the public or limited to specific potential reserve providers.

- the optimal combination of contracts to deliver the reserves necessary to meet the shortfall;
- giving consideration to the estimated average VCR;
- selecting the reserve offers that AEMO considers to be the optimal portfolio of reserve contracts;
- giving consideration to including an early termination clause in the event that the capacity is not needed.

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

- monitoring any low reserve condition declarations
- 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.

Clauses 3.20.6 and 3.20.7 of the *NER* set out AEMO's reporting requirements in relation to the *RERT*.

8.3 Process for contracting for reserve contracts in short-notice situations (less than seven days of notice)

The relevant actions that *AEMO* may take in relation to the exercise of the *RERT* for situations with less than 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 less than seven days of notice of a projected shortfall in reserves;
- continually monitoring the pre-dispatch schedule and short term PASA, for periods of lack of reserve (such as a LOR2 or LOR3)¹¹;
- determining whether to enter into reserves contracts following the declaration of a lack of reserve condition such as a LOR2 or LOR3;
- consulting in advance with the participating jurisdictions¹² 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) reflecting the RERT principle in clause 3.20.2(b)(3);
- 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, having regard to the RERT principle in clause 3.20.2(b)(3);
- giving consideration to the estimated average VCR;

¹¹ According to clause 4.8.4 of the NER, a lack of reserve condition is when AEMO determines, in accordance with the reserve level declaration guidelines, that the probability of load shedding (other than the reduction or disconnection of interruptible load) is, or is forecast to be, more than remote.

¹² 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;
- 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 event.

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

- monitoring any lack of reserve conditions;
- 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.

Clauses 3.20.6 and 3.20.7 of the *NER* set out *AEMO's* reporting requirements in relation to the *RERT.*