

Reliability and Emergency Reserve Trader (RERT)

May 2025

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Quarterly Report Q1 2025

A report for the National Electricity Market

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Important notice

Purpose

AEMO publishes this Reliability and Emergency Reserve Trader (RERT) Quarterly Report in accordance with clauses 3.20.6 and 11.128.5 of the National Electricity Rules. This publication relates to the period 1 January to 31 March 2025 and is based on information available to AEMO as at 1 April 2025, unless otherwise indicated.

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Version control

Version	Release date	Changes
1	15/05/2025	First issue

Executive summary

Reliability and Emergency Reserve Trader (RERT) is an intervention mechanism under the National Electricity Rules (NER) that allows AEMO to contract for emergency reserves, such as generation or demand response, that are not otherwise available in the market. AEMO uses RERT as one of a number of mechanisms in the event that a critical shortfall in reserves is forecast. RERT may be activated when it is the most suitable mechanism after market options have been exhausted, typically during periods when the supply demand balance is tight.

Interim Reliability Reserves (IRR) are a category of reserves which, prior to 31 March 2025, AEMO was able to procure for up to three years to address interim reliability exceedances. A total of 127 MW of Interim Reliability Reserves was contracted in South Australia in respect of the period from 1 January 2025 to 31 March 2025 (reporting period), as follows:

- 17 MW with 3 providers from 1 January 2025 to 28 February 2025; and
- 110 MW with 1 provider from 29 January 2025 to 31 March 2025

The total amount payable by AEMO for contracted IRR over the billing weeks within the reporting period was \$19,089,765.

When contracting RERT (including IRR) AEMO had regard to the RERT principles by seeking to have the least distortionary effect on the market, while maximising the effectiveness of reserve contracts at the least cost to end use consumers of electricity. At each of the relevant times of contracting, AEMO estimated the average amount payable under reserve contracts would be less than the estimated average VCR, see section 4 for more detail.

This report is published under clause 3.20.6(b) of the NER, applied and amended as required by clause 11.128.5 for reserve contracts for IRR, and considers all reserve contracts entered into by AEMO or otherwise in effect during the reporting period.

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1 RERT activity summary Q1 2025

1.1 Contracting

Interim Reliability Reserves (IRR) were contracted during the reporting period for the region of South Australia. These IRR were contracted in accordance with clause 3.20, as modified by clause 11.128, of the National Electricity Rules (NER) to address an interim reliability exceedance forecast for that region in the summer months of 2024-25 in AEMO's 2024 Electricity Statement of Opportunities (2024 ESOO).

Interim Reliability Reserve (IRR) - South Australia

A total of 127 MW of Interim Reliability Reserves (IRR) was contracted in South Australia in respect of the period from 1 January 2025 to 31 March 2025 (reporting period), as follows:

- 17 MW with 3 providers from 1 January 2025 to 28 February 2025; and
- 110 MW with 1 provider from 29 January 2025 to 31 March 2025

These IRR were contracted to address the interim reliability exceedances identified in AEMO's 2024 ESOO. The amount contracted was 73 MW less than the forecast reserve gap in South Australia because no other eligible reserves were available for contracting in accordance with the NER and AEMO's tender requirements.

The 2024 ESOO also identified interim reliability exceedances for those summer months in the regions of New South Wales and Victoria. IRR contracted for NSW were identified in the Q4 2024 quarterly report and no IRR were contracted in Victoria.

No SN RERT was contracted in any region during the reporting period.

1.2 Activation

No RERT or IRR was dispatched or activated during the reporting period.

1.3 Costs incurred

The total amount payable by AEMO for RERT during the Q1 2025 billing weeks² was \$19,089,765. Table 1 shows a breakdown of the amounts payable for IRR in New South Wales and South Australia and payment categories (all amounts paid were availability costs). No costs were incurred for SN RERT as no reserves of this type were dispatched, pre-activated or activated in Q1 2025.

² The 29th, 30th and 31st December 2024 are included in billing week 1 of Q1 2025 so will be considered in this quarterly report.

Table 1 IRR costs incurred for Q1 2025

NEM region	Availability costs (\$)	Pre-activation costs (\$)	Activation costs (\$)	Intervention costs (\$)	Total cost (\$)
New South Wales	\$4,341,107	\$0.00	\$0.00	\$0.00 ³	\$4,341,107
South Australia	\$14,748,658	\$0.00	\$0.00	\$0.00	\$14,748,658
Total Cost					\$19,089,765

The average availability costs for IRR contracts in New South Wales was \$675 per day per MW of reserve and in South Australia was \$1,418 per day per MW of reserve.

³ Intervention costs are subject to change under clause NER 3.12.1(a).

2 Reserve procurement

2.1 Interim Reliability Reserves

As per AEMO's previous quarterly RERT report⁶ (published in February 2025), following a tender process in 2024 AEMO was able to secure a limited amount IRR in New South Wales and South Australia for the summer period of 2024-25. In Q4 2024, AEMO executed:

- IRR contracts with 4 participants for a total of 85 MW of reserve in New South Wales; and

-IRR contracts with 3 participants for a total of 17 MW of IRR in South Australia.

AEMO was unable to procure amounts of IRR sufficient to address the forecast reliability gaps in either of these regions through its tender processes conducted under NER 11.128. Therefore, following the publication of the *National Electricity Amendment (South Australian jurisdictional derogation - Interim reliability reserve eligibility) Rule 2025 No. 1*, AEMO entered into a further IRR contract for a total of 110 MW of reserve in South Australia and with a contract period from 29 January to 31 March. Refer to Table 2 below for details.

Table 2 South Australia Region Contracted IRR

NEM region	Location of Reserve Volume of Reserve (MW)		Duration	
Synergen Power Pty Ltd	South Australia	110	29 Jan 2025 to 31 March 2025	
Total		110		

2.2 SN RERT Panel arrangements

AEMO also maintains a panel of potential RERT providers that are able to offer reserves on short notice (SN RERT) in South Australia, Victoria, New South Wales, Queensland, and Tasmania. SN RERT is able to be contracted on pre-agreed contract terms and prices with these providers.

In consultation with relevant State governments, and as required by the RERT guidelines⁷, AEMO entered into panel agreements with potential SN RERT providers that meet detailed cost, technical, and verification criteria. These SN RERT resources can have different response lead times, activation conditions, costs, and response capabilities; as a result, not all resources will necessarily be activated for a given shortfall event.

⁶ At <u>https://aemo.com.au/energy-systems/electricity/emergency-management/reliability-and-emergency-reserve-trader-rert/rert-reporting</u>

⁷ At <u>https://www.aemc.gov.au/sites/default/files/2020-08/Updated%20Amended%20Panel%20RERT%20Guidelines%20-%2018%20August%202020%20-%20Final%20for%20publication_0.pdf</u>.

Under the panel agreements for SN RERT, no fixed costs or availability costs are incurred, and payments are made based on pre-activation and/or megawatt hours (MWh) activated. AEMO incurs no costs (and consequently there are no costs to consumers), unless SN RERT is pre-activated and/or activated⁸.

During the reporting period, AEMO had a panel of SN RERT providers representing an estimated maximum of over 2000 MW of available reserves across the NEM.

2.3 Short Notice reserves (SN RERT) contracted

AEMO must take all reasonable actions to ensure reliability of supply by negotiating and entering contracts to secure the availability of reserves under reserve contracts. In short notice situations, AEMO may enter into a SN RERT contract in response to a forecast or actual LOR2 or LOR3 condition. The Reserve Level Declaration Guidelines published by AEMO provide guidance for determining the term and quantity associated with a reserve shortfall.

In addition to forecast or actual LOR2 and/or LOR3 conditions, other factors such as projected assessment of system adequacy (PASA) generator availability, may also be considered as inputs into the decision-making process for contracting SN RERT. Under AEMO's panel arrangements, AEMO contracts with potential providers of SN RERT at no cost to consumers (unless the reserve is pre activated or activated under a reserve contract). RERT contracting occurs in the context of highly uncertain and complex power system conditions, where actual and projected reserve levels can change at short notice.

During the reporting period, AEMO did not contract SN RERT in any region.

2.4 AEMO's methodology for contracting RERT

AEMO followed its procedures and the NER (including the RERT principles) in contracting for RERT, including:

- RERT Panel recruitment and IRR procurement.
- Publication of notices.
- Requiring that reserves are not otherwise offered to the market or engaged.
- Determining the term and quantity of reserves to be contracted.

Under NER clause 3.20.2(b), AEMO must have regard to the RERT principles in exercising the RERT. These principles stipulate that AEMO is to take actions that have the least distortionary effect on the operation of the market, that actions taken should aim to maximise the effectiveness of reserve contracts at the least cost to end use consumers of electricity and that the average amount payable by AEMO does not exceed the estimated average Value of Customer Reliability (VCR) per region.

When entering into reserve contracts, AEMO factored these RERT principles into its decision-making:

• To minimise distortionary effects on the operation of the market, AEMO categorises RERT into the following three types based on their pre-activation and activation times:

⁸ For more information on RERT costs, please refer to the AEMO website at <u>https://aemo.com.au/en/energy-systems/electricity/emergency-management/</u> reliability-and-emergency-reserve-trader-rert.

- Type 1 capacity that can be pre-activated and activated in less than 30 minutes. These contracts are pre-activated and activated post-contingency (when an actual LOR3 occurs).
- Type 2 capacity where the sum of the pre-activation and activation lead times is greater than 30 minutes, but the activation lead time alone is less than 30 minutes. This means that for this capacity to be activated post-contingency (when an actual LOR3 occurs), it must be pre-activated in advance of the actual LOR3.
- Type 3 capacity whereby activation requires more than 30 minutes. This capacity needs to be pre-activated and activated in advance to ensure RERT is delivered on time.
- The use of these categories allows for minimal pre-activation and activation, since Type 1 and 2 categories can be activated post-contingent (during LOR3). This not only minimises impacts on the market, but also maximises the effectiveness of reserve contracts at the least cost to end use consumers of electricity.
- AEMO assesses whether offers by potential SN RERT providers will exceed VCR, based on the pre-activation and activation of reserves for one hour or more.
- Interim reliability reserves contracted were assessed based on operational factors, ability to respond, capacity, reserve period, risk and value for money. AEMO assessed the total cost of interim reliability reserves under scenarios based on information provided in the ESOO forecasts.

3 Intervention

3.1 Decisions to intervene

Where market mechanisms are not successful in alleviating a reserve shortfall and the latest time to intervene has been reached, AEMO may intervene in the market by issuing a direction or a clause 4.8.9 instruction, or by exercising the RERT in accordance with NER clauses 3.8.14 and 3.20.

AEMO's approach to determining its choice of supply scarcity mechanism when the need for intervention arises (RERT, direction, or clause 4.8.9 instruction) is detailed in the Supply Scarcity Procedure¹⁰.

In making this decision, AEMO must use reasonable endeavours to choose the mechanism, or combination of mechanisms, that is effective in addressing the supply scarcity conditions while minimising the associated direct and indirect costs.

AEMO's procedure for the exercise of RERT sets out the methodology which it follows in determining the triggers for RERT, as well as the quantity and term of reserves contracted.

In accordance with these procedures, AEMO did not dispatch, pre-activate or activate RERT in the 1st quarter of 2025.

3.2 Intervention pricing

AEMO did not activate RERT during the 1st quarter of 2025 so there was no AEMO intervention event which involved AEMO exercising the RERT nor any relevant intervention price trading intervals for the purpose of NER 3.20.6(e)(6).

3.3 No changes in dispatch outcomes

The activation of RERT can result in changes in dispatch outcomes. This is because the activation of RERT during an actual LOR2 lowers demand, meaning less generation is dispatched. Reserves were not activated in Q1 2025, so there were no changes to dispatch outcomes for the purpose of NER 3.20.6(e)(3).

3.4 Impact on reliability

As there was no dispatch or activation of RERT during this reporting period, impacts on reliability of supply and power system security have not been assessed (NER 3.20.6(e)(10)).

¹⁰ The Supply Scarcity Procedure can be found in appendix A of the Short Term Reserve Management procedure numbered SO_OP_3703, at <u>https://aemo.com.au/energy-systems/electricity/national-electricity-market-nem/system-operations/power-system-operation/power-system-opera</u>

3.5 Estimated costs of load shedding

As there was no dispatch or activation of RERT during this reporting period, the costs of avoided load shedding cannot be estimated for the purposes of NER 3.20.6(e)(9).

4 Cost of exercising RERT

NER clause 3.20.2(b)(2) requires that when AEMO exercises RERT it should have regard to the RERT principles, including the principle that actions taken should aim to maximise the effectiveness of the reserve contracts at the least cost to end-use consumers of electricity. Accordingly, AEMO enters into reserve contracts based on location, cost, capacity, time to activate, minimum activation time, and the profile of the forecast lack of reserve.

AEMO acts to minimise the total cost to consumers by contracting, pre-activating and activating the lowest cost reserves possible. Although no RERT was preactivated or activated, AEMO incurred costs under IRR contracts during the reporting period because IRR contracts include availability charges. These costs are summarised in Table 1 (in section 1.3 of this report).

Table 3 below presents a breakdown of how AEMO's costs for IRR were recovered from Market Participants for the purposes of NER 3.20.6(f)(2). All costs AEMO incurred in contracting for the provision of RERT (including IRR) were recovered from Market Participants.

Region	Participant Category	Payment type	Recovery period start	Recovery period end	Amount Recovered*	Period Total Energy (MWh)	Recovery rate (\$/MWh)
NSW	Market Customers	Availability	29/12/2024 0:05	1/04/2025 0:00	\$4,293,040	18,412,796	\$0.23
SA	customers	Availability	29/12/2024 0:05	1/04/2025 0:00	\$14,637,044	3,833,207	\$3.82
NSW	Market Generators	Availability	29/12/2024 0:05	1/04/2025 0:00	\$47,531	203,859	\$0.23
SA		Availability	29/12/2024 0:05	1/04/2025 0:00	\$52,043	13,629	\$3.82
NSW	Integrated Resource	Availability	29/12/2024 0:05	1/04/2025 0:00	\$537	2,301	\$0.23
SA	Provider	Availability	29/12/2024 0:05	1/04/2025 0:00	\$59,571	15,601	\$3.82

Table 3 Breakdown of how costs were allocated, RERT Q1 2025

*Notes:

1. The reporting period includes billing weeks 1 to 14. As 29, 30 and 31 of December 2024 is included in billing week 1, the cost recovery amounts for this period is included in this quarterly report.

2. Since the IESS rule change, the costs of RERT are recovered from Cost Recovery Market Participants based on adjusted consumed energy (see NER 3.15.9).

As no RERT or IRR was activated or dispatched during the reporting period, AEMO has not estimated any avoided costs of load shedding for the purposes of NER clause 3.20.6 (e)(9).



5 AEMO's intervention process

AEMO's general process for deploying RERT is documented in SO_OP_3717 - Procedure for the Exercise of the Reliability and Emergency Reserve Trader.

AEMO considers that it followed all relevant provisions under NER clause 4.8 and procedures in SO_OP_3717 in determining whether to exercise the RERT in Q1 2025, to the extent it was able to do so.

Glossary

Terms defined in the National Electricity Law and the NER have the same meanings in this report unless otherwise specified below.

Term	Definition		
ESOO	Electricity Statement of Opportunities		
interim reliability exceedance	occurs in a financial year, for a region, if the interim reliability measure will not be met in that region in that financial year as determined by AEMO in a statement of opportunities or in an update to a statement of opportunities		
IRM	interim reliability measure or of 0.0006% USE		
IRR	Interim Reliability Reserves		
LOR1	Lack of Reserve level 1. The threshold for an LOR1 is determined by the larger value of either the FUM or the sum of the two largest credible risks in the region (LCR2).		
LOR2	Lack of Reserve level 2. The threshold for an LOR2 is determined by the larger value of either the FUM or the largest credible risk in the region (LCR).		
LOR3	Lack of Reserve level 3. The threshold for an LOR3 condition is when the forecast reserve for a region is at or below zero.		
NER	National Electricity Rules		
Reporting period	1 January 2025 to 31 March 2025		
RERT	Reliability and Emergency Reserve Trader		
SN RERT	Short notice RERT		
USE	Unserved Energy		
VCR	Value of Customer Reliability		