

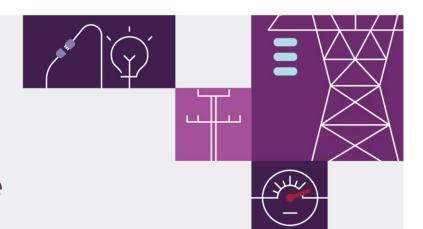
2022 Expressions of Interest summary report

June 2022

A report for the Wholesale Electricity Market







Important notice

Purpose

AEMO has prepared this document to provide information about the Western Australia Wholesale Electricity Market, as at the date of publication.

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Version control

Version	Release date	Changes
1.0	30/6/2022	Initial release.

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1 Background

Each year, the Australian Energy Market Operator (AEMO) requests expressions of interest (EOIs) from existing and potential new Market Participants to provide Reserve Capacity. The EOI indicates the amount of new capacity (new Energy Producing Systems and/or Demand Side Management [DSM]) that may be offered into the South West Interconnected System (SWIS) for a Reserve Capacity Cycle¹.

On 10 January 2022, AEMO requested EOIs for the 2022 Reserve Capacity Cycle (that is, the 2024-25 Capacity Year²). EOI submissions closed on 9 May 2022. AEMO must publish an EOI summary by 30 June 2022 in accordance with clause 4.1.6³ of the Wholesale Electricity Market Rules (WEM Rules).

This report provides a summary of EOIs submitted to AEMO for the 2024-25 Capacity Year. In accordance with clause 4.2.7 of the WEM Rules, the report must outline the following information:

- The number of EOIs received.
- Based on the EOIs, the additional Reserve Capacity potentially available (which must be categorised).
- AEMO's estimate of the existing capacity eligible to be assigned Certified Reserve Capacity (CRC)⁴ in the SWIS.
- The preliminary Reserve Capacity Requirement (RCR) determined in accordance with clause 4.6.3 of the WEM Rules.

2 Summary

AEMO received 164 EOIs for the 2024-25 Capacity Year. In some cases, multiple EOIs were submitted for the same Facility or upgrade⁵, representing different possible configuration options (for example, different system sizes or connection points). AEMO has selected the EOIs with the maximum amount of potential Reserve Capacity for each Facility or upgrade in these cases to estimate the additional Reserve Capacity potentially available reported in this EOI summary report. As a result, 73 EOIs were considered duplicates and not included in the estimate. The remaining 91 EOIs represent Energy Producing Systems and have been included in the report.

¹ A Reserve Capacity Cycle is a cycle of events (occurring over four successive calendar years period) described in clause 4.1 of the WEM Rules.

² A Capacity Year is defined in Chapter 11 (Glossary) of the WEM Rules as a period of 12 months commencing on the start of the Trading Day on 1 October and ending on the Trading Day ending on 1 October of the following calendar year. A Trading Day is a period of 24 hours commencing at 08.00.

³ AEMO deferred key events in Year 1 of the 2022 Reserve Capacity Cycle including the date for publishing the 2022 EOI summary in accordance with clause 1.36B.3 of the WEM Rules, see: https://aemo.com.au/-/media/files/electricity/wem/reserve_capacity_mechanism/timetable/2022-reserve-capacity-cycle-timetable.pdf?la=en.

⁴ CRC is a quantity of Reserve Capacity that AEMO has assigned to a Facility for a Reserve Capacity Cycle in accordance with the WEM Rules.

⁵ AEMO consulted with project proponents to determine which EOIs belong to the same Facility.

The total additional Reserve Capacity potentially available for the 2024-25 Capacity Year is estimated to be 1,310.869 megawatts (MW). No EOIs were received from Demand Side Programmes. Six EOIs were Small Aggregation having Electric Storage Resource (ESR) components with an estimated 22 MW of additional Reserve Capacity potentially available.

Table 1 Summary of EOIs from Energy Producing Systems, the 2024-25 Capacity Year

Facility Technology Type	Number of EOIs		Additional Reserve Capacity potentially available (MW)
	New	Upgrades	
Intermittent Generating Systems (IGS)	12	1	398.160
IGS + ESR	7	1	125.400
Non-Intermittent Generating Systems (NIGS)	1	6	31.609
NIGS + ESR	0	2	82.000
ESR	61	0	673.700 ^A
Total	81	10	1,310.869 ^B

A. This figure includes the 22 MW additional Reserve Capacity of the six Small Aggregation Facilities.

The preliminary RCR published in the 2022 Request for EOI⁶ for the 2024-25 Capacity Year was 4,409 MW. This is 117 MW lower than the final RCR of 4,526 MW as published in the 2022 WEM Electricity Statement of Opportunities⁷. The forecast supply-demand balance outlined in Table 2 is based on 4,526 MW.

Table 2 Forecast supply-demand balance, the 2024-25 Capacity Year

Capacity Credits assigned for the 2023-24 Capacity Year	4,726.572
Potential capacity provided by 2022 EOI submissions	1,310.869
Estimate of the existing capacity eligible to be assigned CRC for the 2024-25 Capacity Year ^A	4,533.572
RCR for the 2024-25 Capacity Year	4,526.000
Estimated excess capacity for the 2024-25 Capacity Year, excluding potential capacity provided by 2022 EOI submissions	7.572 (0.2%)
Estimated excess capacity for the 2024-25 Capacity Year, including 2022 EOI submissions	1,318.441 (29.1%)

A. All Facilities are assumed to receive the same quantity of Capacity Credits in the 2024-25 Capacity Year as in the 2023-24 Capacity Year other than the planned retirement of Muja C unit 6 (193 MW) in the 2024-25 Capacity Year.

2.1 Categories of EOI submissions

The EOI submissions for the 2024-25 Capacity Year are summarised in Table 3 in accordance with clause 4.2.7 of the WEM Rules.

B. This figure includes both committed and not yet committed Facilities, see Table 3 for details.

⁶ See https://aemo.com.au/-/media/files/electricity/wem/reserve capacity mechanism/eoi/2022/2022-request-for-expressions-of-interest.pdf?la=en.

⁷ See https://aemo.com.au/energy-systems/electricity/wholesale-electricity-market-wem/wem-forecasting-and-planning/wem-electricity-statement-of-opportunities-wem-esoo

Table 3 EOI submissions by category, the 2024-25 Capacity Year^A

Summary of EOIs	Additional Reserve Capacity potentially available (MW)
Committed Facilities (in place or under construction)	116.337
Facilities that are not yet committed	1,194.533
Total	1,310.869
For Facilities that are not yet committed	
Facilities for which an Access Proposal has been made and all necessary Environmental Approvals granted	188.620
Facilities for which applications for both Access Proposals and Environmental Approvals have been made and one or both are being processed	0.000
Facilities for which no Access Proposal has been applied for or some or all Environmental Approvals have not been applied for	1,005.913
Total	1,194.533
Categorisation based on Facility Technology types	
IGS	398.160
IGS + ESR	125.400
NIGS	31.609
NIGS + ESR	82.000
ESR	673.700
Non-Dispatchable Load	0.000
Total	1,310.869
Categorisation based on technology for Energy Producing Systems	
Solar photovoltaic	226.838
Wind turbine	202.860
Biogas-powered generation	0.100
Electric storage system ^B	817.462
Gas-powered generation	63.312
Distillate-powered generation	0.297
Total	1,310.869
Categorisation by number of proposed technologies	
1 technology	1,103.469
2 technologies	207.400
Total	1,310.869
Categorisation based on primary fuel type	
Liquid	0.297
Non-liquid	63.312
Renewable energy	429.798
•	817.462
Electric storage	017.402

Summary of EOIs	Additional Reserve Capacity potentially available (MW)
Categorisation based on backup/alternative fuel option	
None or not applicable	1,310.869
Total	1,310.869

A. The figures have been adjusted from the nameplate capacity figures provided by the project proponents to account for an estimate of the Relevant Level for IGS.

B. This figure includes facilities containing both electric storage and pumped hydroelectric systems.