

2019 Reserve Capacity Information Pack

June 2019

A report for the Wholesale Electricity Market

Important notice

PURPOSE

AEMO publishes the 2019 Reserve Capacity Information Pack under clause 4.7.2 of the Wholesale Electricity Market Rules.

This publication has been prepared by AEMO using information available at 15 June 2019.

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VERSION CONTROL

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1. Background

Each year, AEMO must publish the Reserve Capacity Information Pack under clause 4.7.2 of the Wholesale Electricity Market (WEM) Rules for the South West interconnected system (SWIS) in Western Australia.

This Reserve Capacity Information Pack relates to the 2019 Reserve Capacity Cycle and sets the Reserve Capacity Requirement (RCR)¹ for the 2021-22 Capacity Year², as published in the 2019 WEM Electricity Statement of Opportunities (ESOO).

The 2019 WEM ESOO presents AEMO's 2019 Long Term Projected Assessment of System Adequacy (PASA) for the SWIS over the 10-year Long Term PASA Study Horizon for the 2019-20 to 2028-29 Capacity Years. It provides information on the Request for Expressions of Interest (REOI) process completed in May 2019 and the Availability Classes and Availability Curve developed for the 2021-22 Capacity Year.

A more detailed discussion of the information in this document can be found in the 2019 WEM ESOO³.

Please direct any questions about this to AEMO's Reserve Capacity team on (08) 9469 9800 or wa.capacity@aemo.com.au.

2. Reserve Capacity Requirement

The RCR for the 2021-22 Capacity Year is 4,482 MW.

3. Availability Classes

Certified Reserve Capacity (CRC) is classified into two classes based on capacity availability 4:

- Availability Class 1 relates to generation capacity and any other capacity that is expected to be available
 for dispatch for all Trading Intervals, allowing for outages or other restrictions.
- Availability Class 2 relates to capacity that is not expected to be available for dispatch for all Trading Intervals

The 2019 Long Term PASA determined the minimum capacity required to be provided by Availability Class 1 capacity for the 2021-22 Capacity Year. The Availability Class 2 capacity allowance is equal to the RCR less the Availability Class 1 requirement. Capacity shortfalls occur when:

- Availability Class 1 capacity is less than the minimum Availability Class 1 capacity requirement.
- Availability Class 1 and Availability Class 2 capacity is less than the RCR.

The minimum Availability Class 1 capacity requirement and the capacity associated with Availability Class 2 for the 2021-22 Capacity Year is outlined in Table 1.

¹ The RCR is AEMO's determination of the total amount of generation or Demand Side Management capacity required in the SWIS to satisfy the Planning Criterion under clause 4.5.9 of the WEM Rules for a specific Reserve Capacity Cycle.

² A Capacity Year commences in the Trading Interval starting at 8:00 AM on 1 October and ends in the Trading Interval ending at 8:00 AM on 1 October of the following calendar year. All data in this WEM ESOO is based on Capacity Years unless otherwise specified.

³ Available at: https://www.aemo.com.au/Electricity/Wholesale-Electricity-Market-WEM/Planning-and-forecasting/WEM-Electricity-Statement-of-Opportunities.

⁴ See clause 4.11.4 and the definitions of "Availability Class 1" and "Availability Class 2" in Chapter 11 of the WEM Rules.

Table 1 Availability Classes for the 2021-22 Capacity Year

	2021-22 (MW)
Minimum capacity required to be provided by Availability Class 1	3,657
Capacity associated with Availability Class 2	825
RCR	4,482

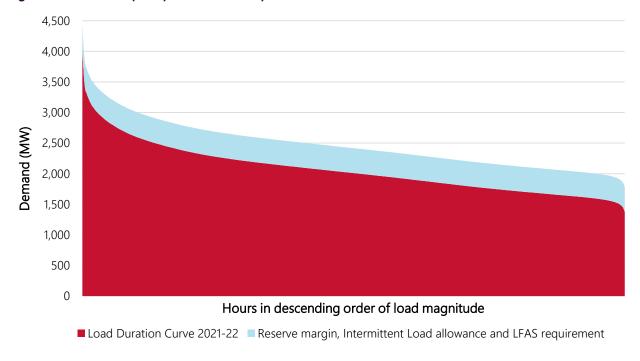
Source: Robinson Bowmaker Paul.

4. Availability Curve

The Availability Curve is a two-dimensional duration curve of the forecast minimum capacity requirement for each Trading Interval over a Capacity Year⁵. The minimum capacity requirement for each Trading Interval is calculated as the sum of the forecast demand for that Trading Interval, reserve margin, Intermittent Load allowance, and the Load Following Ancillary Service (LFAS) capacity requirement.

The 2019 Long Term PASA study developed the Availability Curve for the 2021-22 Capacity Year, as shown in Figure 1.

Figure 1 2021-22 Capacity Year Availability Curve



Source: RBP.

⁵ As defined in clause 4.5.10(e) of the WEM Rules.

5. Expressions of Interest process

The 2019 REOI and the corresponding summary reports are available on AEMO's website⁶.

 $^{^{6} \ \ \}text{Available at:} \ \underline{\text{https://www.aemo.com.au/Electricity/Wholesale-Electricity-Market-WEM/Reserve-capacity-mechanism/Expressions-of-interest.}$