

Looking beyond the horizon

Forecasting Western Australia's electricity consumption trends from 2018–19 to 2027–28

AEMO's Wholesale Electricity Market Electricity Statement of Opportunities (WEM ES00) provides peak demand and operational consumption forecast for the South West interconnected system (SWIS) over a ten-year outlook period from 2018-19 to 2027-28. This report sets key parameters to support the operation of the Reserve Capacity Mechanism.

What is the Reserve Capacity Target (RCT)?

The RCT sets the quantity of capacity required in the SWIS to ensure there is sufficient capacity to meet reliability targets.

For the 2019-20 Capacity Year, **62** Facilities were assigned 4,888 MW of Capacity Credits to meet the RCT.

- 39** are Scheduled Generators.
- 21** are Non-Scheduled.
- 2** are Demand Side Management Facilities.

4,581 MW

Based on the 10% Probability of Exceedance (POE) peak demand forecast, the RCT for the 2020-21 Capacity Year. Based on announced generation installations and requirements, AEMO has forecast sufficient capacity for the 2020-21 Capacity Year.

The **10%** POE peak demand is forecast to grow at an average annual rate of **0.6%** over the outlook period. This is lower than the 2017 WEM ES00 forecast of **1.6%**, contributed by lower economic and population growth forecasts in the 2018 WEM ES00.

0.9% Annual operational consumption is forecast to grow slowly at an average annual rate of 0.9% over the outlook period.

WA electricity consumption in 2016–17



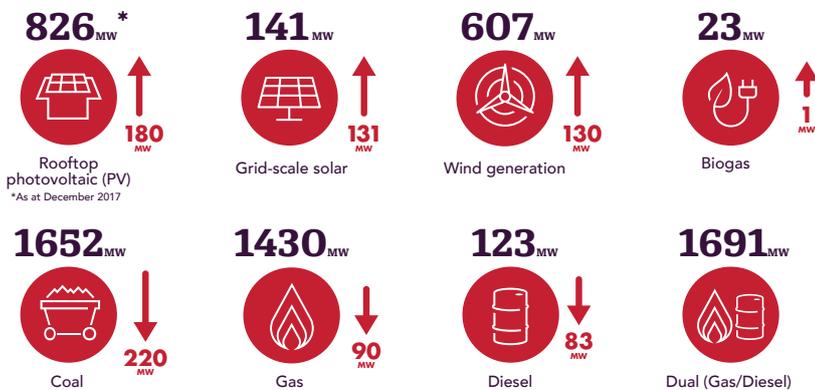
Commercial
13,232
GWh



Residential
5,030
GWh

The changing generation mix in 2019-20

(Nameplate Capacity) Compared to 2017 WEM ES00 figures



Current market developments

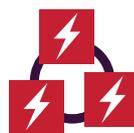
To match the pace of change in Western Australia's electricity markets, the Government, industry and AEMO will continue to collaborate on the following bodies of work to ensure security and reliability is maintained for all consumers in the SWIS.



WA Government's electricity industry reform program - in August 2017, the Minister for Energy announced an electricity reform program to be completed by the Public Utilities Office.



Upcoming WEM reviews - the Economic Regulation Authority (ERA) is required to complete a number of five-yearly reviews for various processes and calculations required by the WEM Rules. The ERA will engage with Market Participants and will progress these reviews until at least 2021.



Generator Interim Access arrangement - this mechanism will help support the connection of new generators on a preferentially constrained access basis before the introduction of a constrained network model as part of the electricity industry reform.

About AEMO

This infographic has been developed by the independent Australian Energy Market Operator (AEMO), using information from the 2018 Electricity Statement of Opportunities for the Wholesale Electricity Market.

AEMO plans, develops, and operates markets that are responsive to energy sector needs and support investment for the long-term benefit of Australian consumers.

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