AEMO

2025

Wholesale Electricity Market (WEM) Electricity Statement of Opportunities (ESOO)

A 10-year outlook for Western Australia's South West Interconnected System (SWIS), which forecasts electricity generation and storage capacity, and network requirements to signal investment needed for reliable and secure electricity supply.

Key insights

For the 10-year outlook period from 1 October 2025 through to 1 October 2034

Consumption

Underlying electricity consumption is anticipated to grow from 20 terawatt hours (TWh) to 28 TWh across the outlook period.

This is more subdued than previously expected, due to improving energy efficiency, and reduced commercial and industrial electrification.

Peak demand

Extreme temperatures in the two most recent summers have pushed near-term peak demand forecasts higher.

It is expected to reach 4,734 megawatts (MW) in 2025-26, then grow to 5,027 MW by 2029-30.

Supply

A further 1,100 MW of committed* capacity is forecast to be online by October 2027, building on the entry of 500 MW of battery storage since 2023.

This includes battery storage (806 MW), demand side programs (172 MW), gas-fired generation (106 MW), and waste-to-energy (59 MW).

Investment interest remains strong

In addition to the committed supply, there is a further 507 MW^ of forecast probable projects in the pipeline that could be available by 2027-28.

Also 2,300 MW of proposed capacity was submitted under the expressions of interest stage of the 2025 Reserve Capacity Cycle.

Timely delivery crucial

The 2025 WEM ESOO highlights the importance of getting the right mix of generation and storage investment, following the closure of ageing coal and gas-fired power stations.

While the project pipeline is strong, ongoing investment and efficient delivery of network assets is also critical to support electricity security and reliability in the SWIS.

The WEM ESOO identifies the capacity required to be procured through the WEM's Reserve Capacity Mechanism two years ahead of time.

AEMO can procure additional capacity outside of this process via the Supplementary Capacity (SC) and Non-Co-optimised Essential System Services (NCESS) mechanisms to support power system security and reliability.

AEMO has procured more than 1,000 MW of capacity to-date through NCESS to help manage operational risks.

If required for the 2025-26 summer, AEMO will trigger a SC process.

SWIS fast facts

The SWIS is one of the most isolated large power systems in the world, making it challenging to manage weather events, consumption behaviours, as well as generation availability and type.

All of the top 10 highest demand days on record in the SWIS occurred during the 2023-24 and 2024-25 summers.

Currently installed on around 40% SWIS homes and businesses, rooftop solar uptake continues to grow, along with modest uptake of home batteries, which is supported by government schemes.

*Projects that have received Capacity Credits, or have been contracted through the Non-Co-optimised Essential System Services framework, are considered to be 'committed' capacity. For other new projects, AEMO assesses and scores them based on the extent of their progress, which is outlined in the report.

^ Capacity credit equivalent