

## 2023

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

Forecasting electricity demand and operational consumption trends for the next 10 years for the South West Interconnected System (SWIS).

## Key findings:

For the 10-year outlook period (2023-2033)



Consumption



**Electricity use** (excluding rooftop solar) is forecast to increase on average 5.6% annually.

This growth is driven by the expected electrification of transportation and industry.



Peak demand



**Peak demand is forecast** to grow on average 4.4% per annum.

Rising peak demand is propelled by industrial consumption, electrification of businesses, electric vehicle adoption, and increased air conditioning.

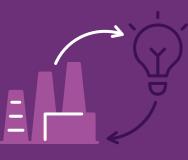


Small-scale solar



Small-scale solar, or distributed photovoltaic (DPV), is forecast to grow on average 8.1% annually.

DPV uptake is mounting due to forecast reductions in the cost of PV systems, and the relatively short payback period.



Supply



For the first time, the WEM ESOO has identified generation capacity shortfalls throughout the entire outlook period.

This is a significant shift on the 2022 outlook and is driven by increasing demand, higher risk of generation outages and planned plant retirements.



Investment required



Investment in generation storage and transmission is required to meet forecast reliability gaps and to underpin a resilient, low-emission power system.

While AEMO is taking steps to address near-term supply gaps, the ESOO signals investment in capacity is required through the WEM's Reserve Capacity Mechanism from 2025.

## **SWIS** fast facts



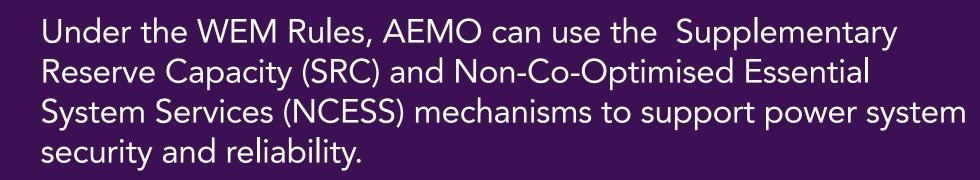
The SWIS supplies electricity to approximately 1.2 million WA households and businesses.



About 38% of SWIS households currently have rooftop solar installed



A minimum demand record was reached in October 2022 when 70% of total demand in the SWIS was met by rooftop solar.



AEMO has commenced a process to procure **SRC** for the 2023-24 Hot Period.

AEMO is in the final stages of contracting **NCESS** to secure capacity to help manage peak and minimum demand risks from 2024-26.



comprising 7,700 km of transmission and 93,350 km of distribution powerlines.