



AEMO QUARTERLY ENERGY DYNAMICS 3Q2024

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Underlying demand was +3.4% yoy during 3Q2024, and despite a new Q3 high for distributed PV output of 2,539MW (+11%), operational demand averaged 21,825 MW, +2.6% from 3Q2023.

Wholesale spot prices averaged \$119/MWh across the NEM in 3Q2024, up \$56/MWh or +88% yoy due to lack of sufficient new supply, particularly of BESS for firming and coal prices still double the long term average.

Despite low hydro generation this quarter (-22% yoy), the overall contribution of renewables to supply reached a new record third quarter high of 39.3%.

A new peak renewable contribution record was set in the half-hour period on Monday, 9 September 2024 at 72.2% of total NEM generation. Australia is well on the way to 100% instantaneous VRE penetration.

Excellent to see that in 3Q2024, 45.6GW of new capacity was progressing through the connection process from application to commissioning, +36% yoy. This capacity includes 14.6GW of battery projects, +87% yoy. Australia desperately needs to get this new infrastructure approved at speed and into construction, then commissioned. Only a significant amount of new firmed generation capacity will permanently reduce the fossil fuel hyperinflation smashing Australians over the last 3 years.

There is signs the regulators and planning departments are finally waking up to the cost to Australians of their lethargy. Connections projects reaching milestones during 3Q2024 increased substantially, with 2.6GW reaching application approval, 3.5GW registered and connected to the NEM, and 1.3GW progressing through commissioning to reach full output. But this needs to double again. Speed and scale will solve the energy cost of living crisis, and allow the end of life coal clunkers to retire whilst we see permanent downward pressure on energy prices.

As Treasurer Chalmers warned again yesterday, Australia's overreliance on expensive, volatility and inflationary imported petrol and diesel needs to be permanently removed. The sooner Australia accelerates the electrification of

everything, including mining equipment, trucks and passenger vehicles, the sooner our energy cost of living pressures will abate, and we will act on the climate emergency smashing Spain overnight, Florida and Nepal this month. The economic and environmental cost of fossil fuel incumbency sponsored inaction is simply too high and rising.

Figure 3 Year-on-year increase in underlying and operational demand

NEM average underlying and operational demand – Q3s

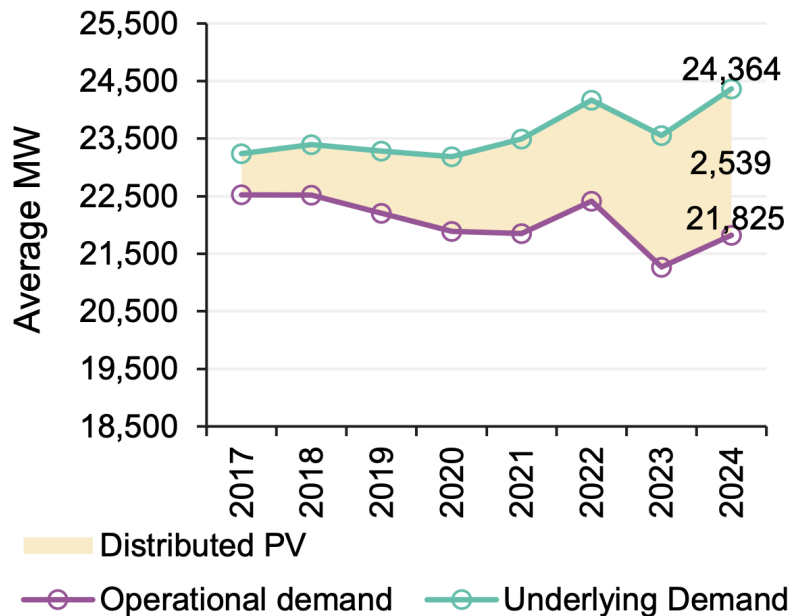
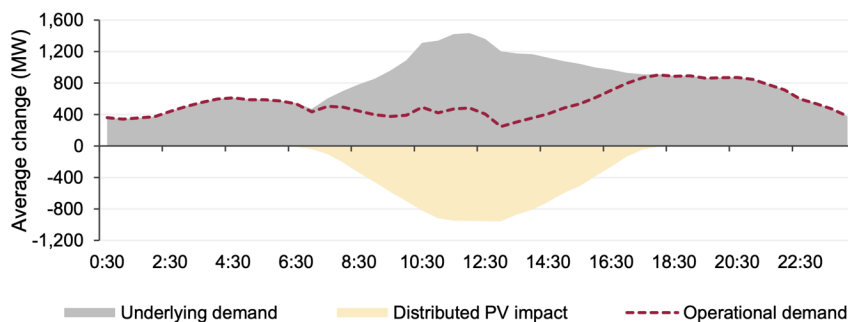


Figure 5 highlights the solar duck curve in full operation, and the clear and rising need for accelerated deployments of BESS, behind the meter energy storage and batteries-on-wheels to time shift cheap zero emissions solar generation to when it is needed, and for demand response management capacity deployments as well. BESS can be deployed rapidly and where best needed, to overcome delays to VRE deployments waiting for massive grid T&D projects, and reducing the overall need for grid expansions.

Figure 5 Operational demand increased at all times of the day

Changes in NEM average operational demand by time of day – Q3 2024 vs Q3 2023



<https://aemo.com.au/-/media/files/major-publications/qed/2024/qed-q3-2024.pdf?la=en>