

Fact Sheet

Delaying coal power exits: A costly and risky bet



Australian coal plants' average age is 38 years, nearing the average closure age of 42 years



Plant availability declined to 66% in the 10 years before closure



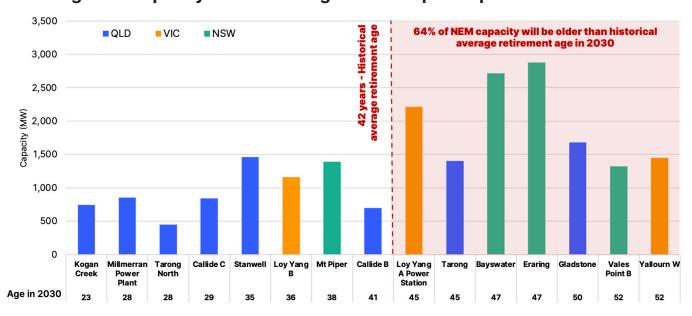
Coal outage periods drive electricity price spikes



Extensions can involve costly refurbishments and present safety risks

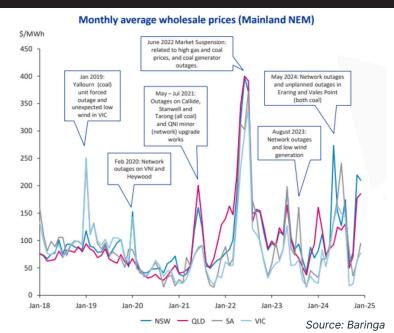
- There are 15 operational coal-fired power stations across the National Electricity Market (NEM),
 with a total capacity of 21 gigawatts (GW) and an average unit age of 38 years.
- Since 2000, 13 coal-fired power stations have closed in the NEM at an average age of 42 years.
 By 2030, almost two thirds of NEM operating coal capacity will exceed this average retirement age.
- The average availability of the closed coal power stations in the 10 years before they retired was just 66%. This compares with typical availability above 80% for younger coal plants.
- Failure to account for this reduced availability in energy planning risks shortages and price shocks.

Age and capacity of the existing coal-fired power plants in the NEM



Coal outages are driving price spikes

- Baringa identified that most major recent spikes in wholesale prices corresponded with coal generator outages. When coal power plants have outages more expensive electricity generators usually step in, such as gas, which drives prices upward.
- The Australian Energy Market Operator found that lower coal availability combined with higher-priced black coal bids was driving up prices in recent quarters.



Extensions require costly and risky refurbishments

High costs were seen with proposed or finished refurbishments at Muja AB, Hazelwood and Liddell, with project costs ranging from \$400 million to \$1.3 billion (in 2025 dollars).

- Hazelwood and Liddell: the refurbishment was deemed too expensive and problematic to pursue.
- Muja AB: refurbishment went ahead, with many technical issues and cost overruns, and the plant only operated for a short time at an extremely low utilisation rate - reportedly 20% - before closing.

Banks are reluctant to finance coal power plant projects, meaning refurbishment projects may struggle to access financing from the private sector.

Extensions present safety risks from fires and explosions

Coal power plants involve highly flammable fuels, very high temperatures, intense pressures and heavy equipment moving at high speeds. As power plant equipment ages, it becomes more prone to catastrophic failures that can lead to dangerous accidents, risking the safety of workers and nearby communities. Some examples are listed below:

FIRES



Hazelwood

2014

Large-scale fire at mine for 45 days

Morwell

2003

Major briquette factory fire 2013 - fire in raw coal bunker

Northern

2015

Fire in coal bunker sparked an explosion in the plant

EXPLOSIONS



Callide C

2021

Catastrophic explosion at unit C4 2025

> Pressure spike in boiler at unit C3

Yallourn

2021

Explosion in a pulverised fuel mill

Muja AB

2012

Boiler pipe exploded and released a burst of steam

About IEEFA

The Institute for Energy Economics and Financial Analysis (IEEFA) examines issues related to energy markets, trends and policies. The Institute's mission is to accelerate the transition to a diverse, sustainable and profitable energy economy.