

Victorian Electricity Outage - 13 February 2024

16 February 2024

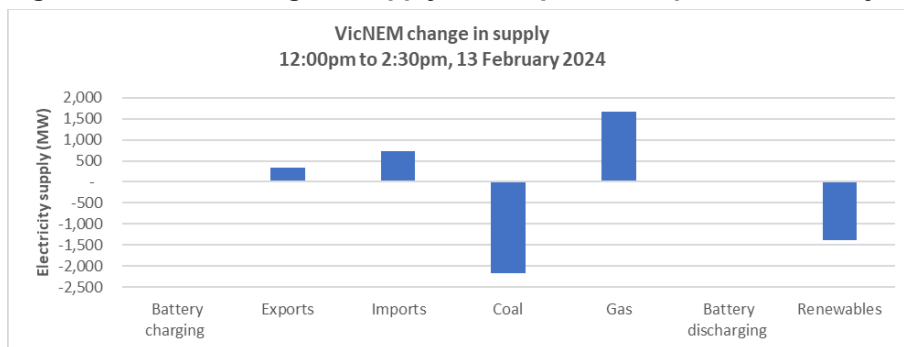
Background

On 13 February 2024 at approximately 2pm the Loy Yang coal fired power plant went offline. Loy Yang is Victoria's largest electricity generator with a capacity of 2,370 MW. The outage was caused by significant storm activity across Victoria which damaged transmission lines which in turn caused Loy Yang to trip.¹ At the peak, 530,000 homes and businesses were without power which had fallen to 127,743 by 5pm on 14 February 2024.²

Impact on price and supply

The outage led to coal power generation (CPG) output in Victoria falling from 3,990 MW at 12:00pm to 1,816 MW at 2:30pm - a drop of 55%. Victorian gas power generation (GPG) quickly responded and rose from 0 MW at 12:00pm to 1,673 MW at 2:30pm. Net imports from the NEM also increased over this period, while renewables output was down 1,381 MW possibly due to the adverse weather that caused the outage (Figure 1). At 2:30pm hydro contributed 27% of VicNEM supply, wind and solar 23%, CPG 21%, GPG 19%, and imports 10%. GPG peaked at 4pm when it was contributing 26%.

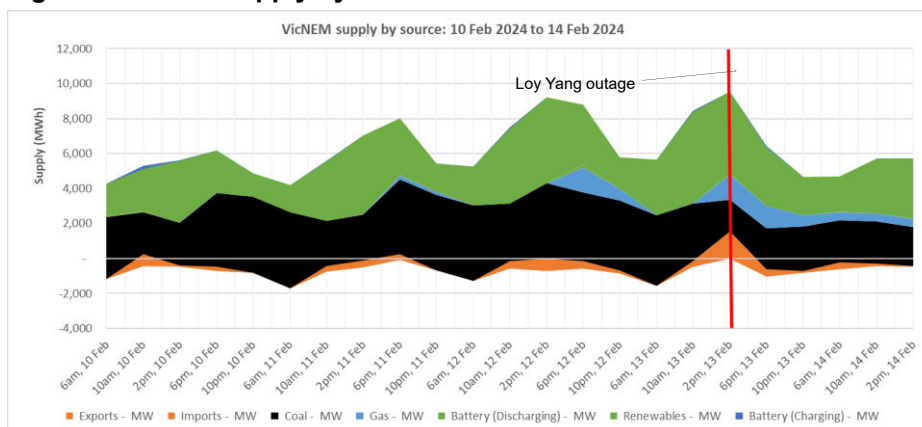
Figure 1 VicNEM change in supply – 12:00pm to 2:30pm, 13 February 2024



Source: AEMO

The outage therefore had a significant impact on Victoria's electricity supply mix with GPG and net imports making up for Loy Yang being offline (Figure 2).

Figure 2 VicNEM supply by source: 10 Feb 2024 to 14 Feb 2024



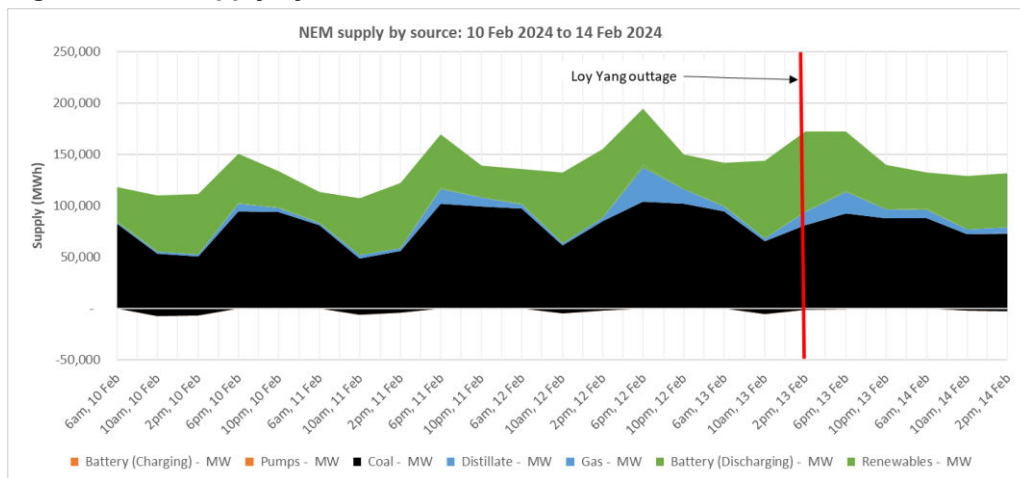
Source: AEMO

¹ AGL, '[Outage at Loy Yang A Power Station on 13 February 2024](#)', 14 February 2024

² AEMO, '[Power system event in Victoria](#)', accessed 15 February 2024

The outage was less significant for the NEM as a whole and peak output from GPG in the NEM on 13 February was 39% lower than the previous day. However, it is notable that GPG has continuously operated since the outage, albeit at moderate levels (Figure 3).

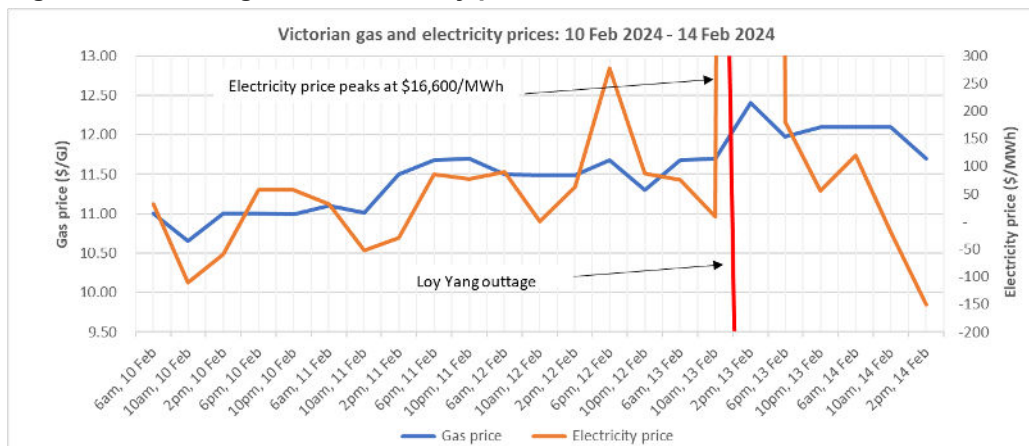
Figure 3 NEM supply by source: 10 Feb 2024 to 14 Feb 2024



Source: AEMO

The impact of the outage on Victorian electricity prices was extreme with prices peaking at \$16,600/MWh at 2:00pm but prices then fell steeply to negative levels at 10:00am on 14 February. There was also a price peak in the NEM as a whole to \$6,443/MWh at 2:00pm on 13 February but NEM prices were negative by 3:30pm on the same day. The increase in GPG and electricity prices did impact spot gas prices in the Victorian Declared Wholesale Gas Market but only to a moderate degree with prices peaking at \$12.40/GJ at 2pm on 13 February (Figure 4)

Figure 4 Victorian gas and electricity prices: 10 Feb 2024 - 14 Feb 2024



Source: AEMO

The moderate impact on gas prices is likely due to:

- The short-term impact of the outage on electricity prices.
- The capacity of the NEM as whole to increase supply to Victoria.
- Decreased demand for electricity as transmission lines were also down leaving many households and businesses without power.

The availability of GPG played a significant role in balancing the VicNEM during the outage. GPG played a similar role in the winter of 2022 but there were markedly different outcomes for prices as, in contrast to the recent outage, the winter of 2022 involved an extended period of relatively low output from CPG and renewables, which occurred across the NEM, and did not coincide with transmission outages.