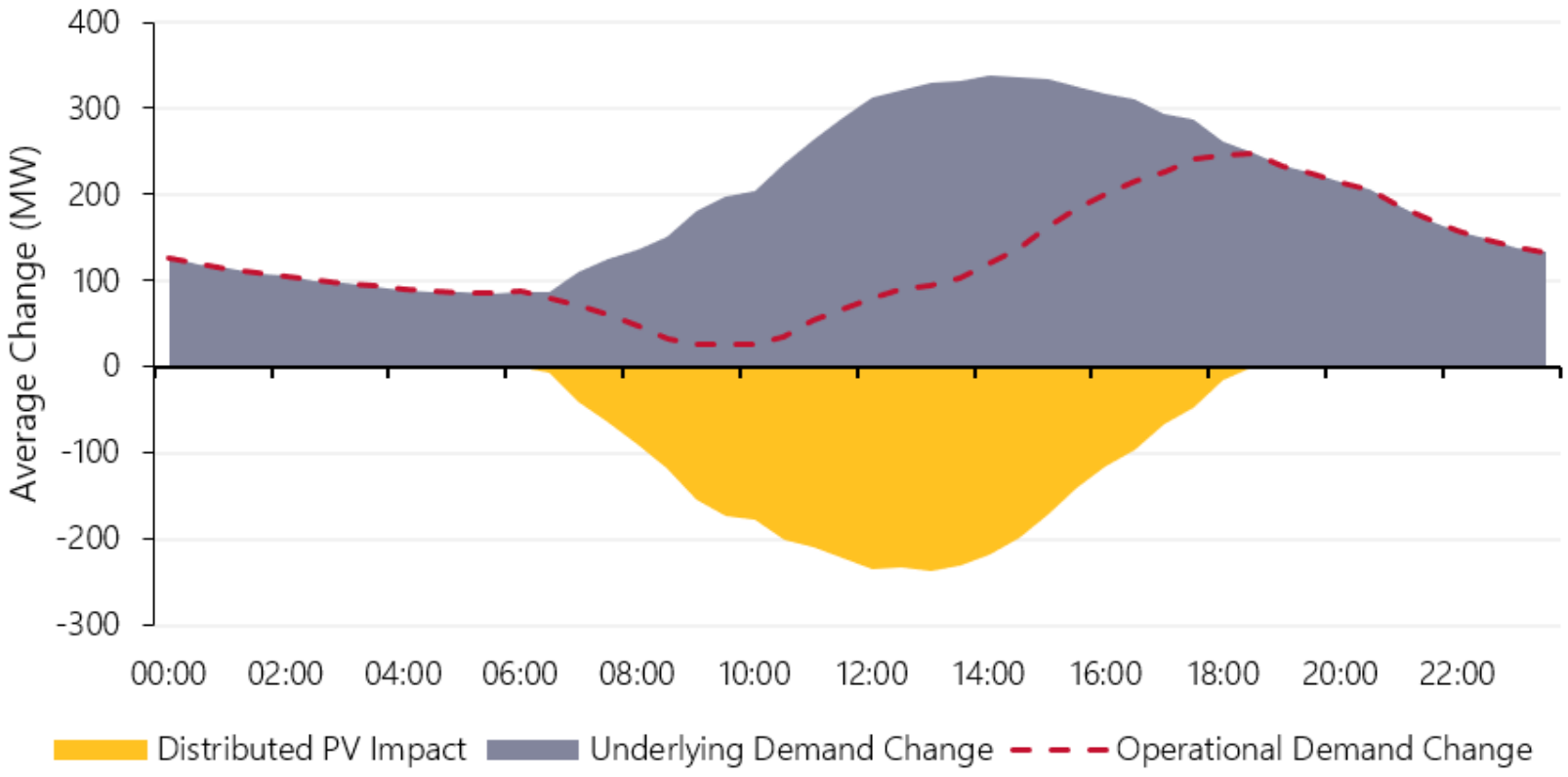
# Quarterly Energy Dynamic (QED) report – Q1 2022

Presented to WA Electricity Consultative Forum

By Rachel Tandy, Market Analyst, Western Australia & Strategy

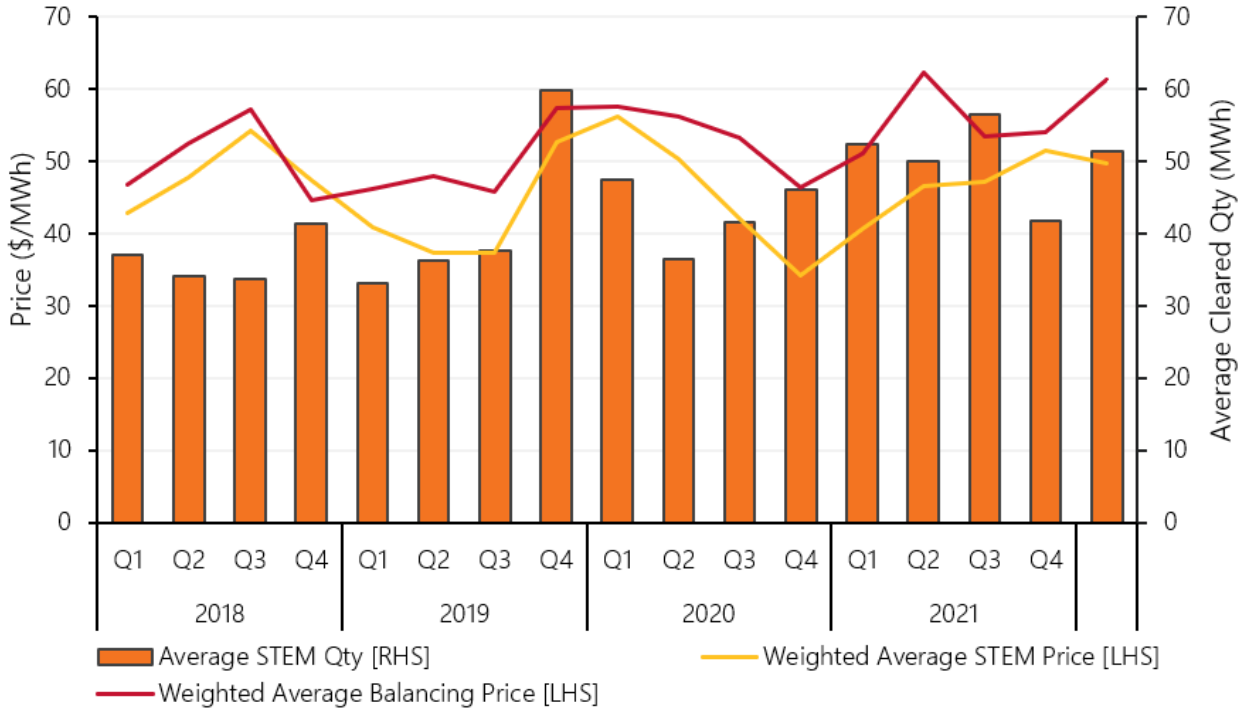
4 May 2022

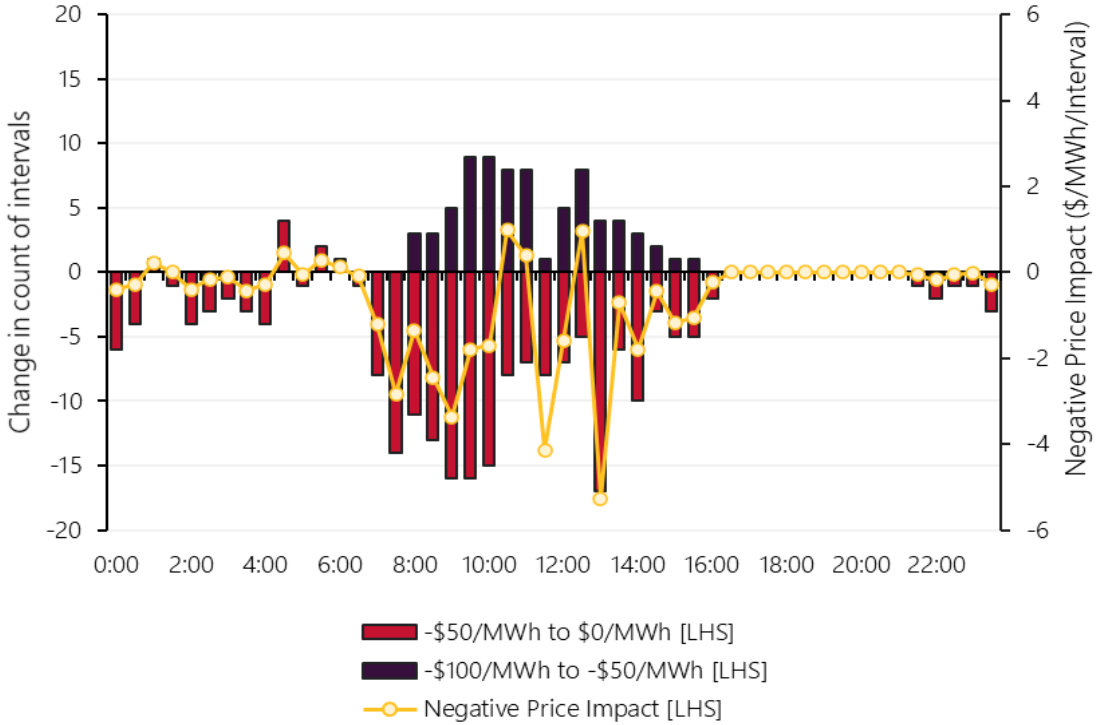
# Electricity demand




- Average maximum temperatures 1.7°C higher than the 10-year Q1 average drove operational demand to increase this quarter, despite an average 72 MW growth in distributed PV output.
- A record was set for second highest all-time maximum operational demand on 19 January when demand reach 3,980 MW (highest since 2016)

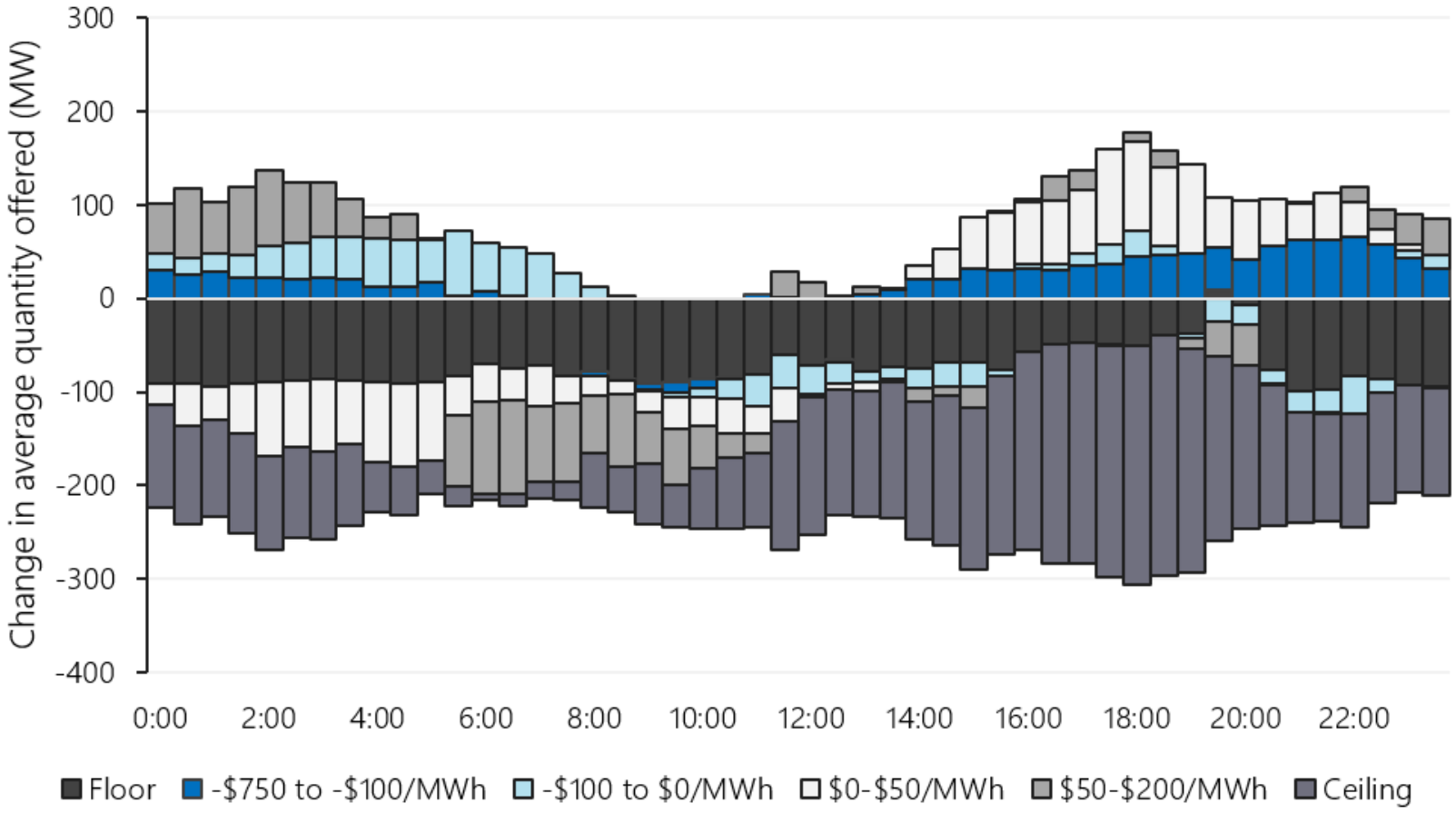
# WEM Prices – Price trends



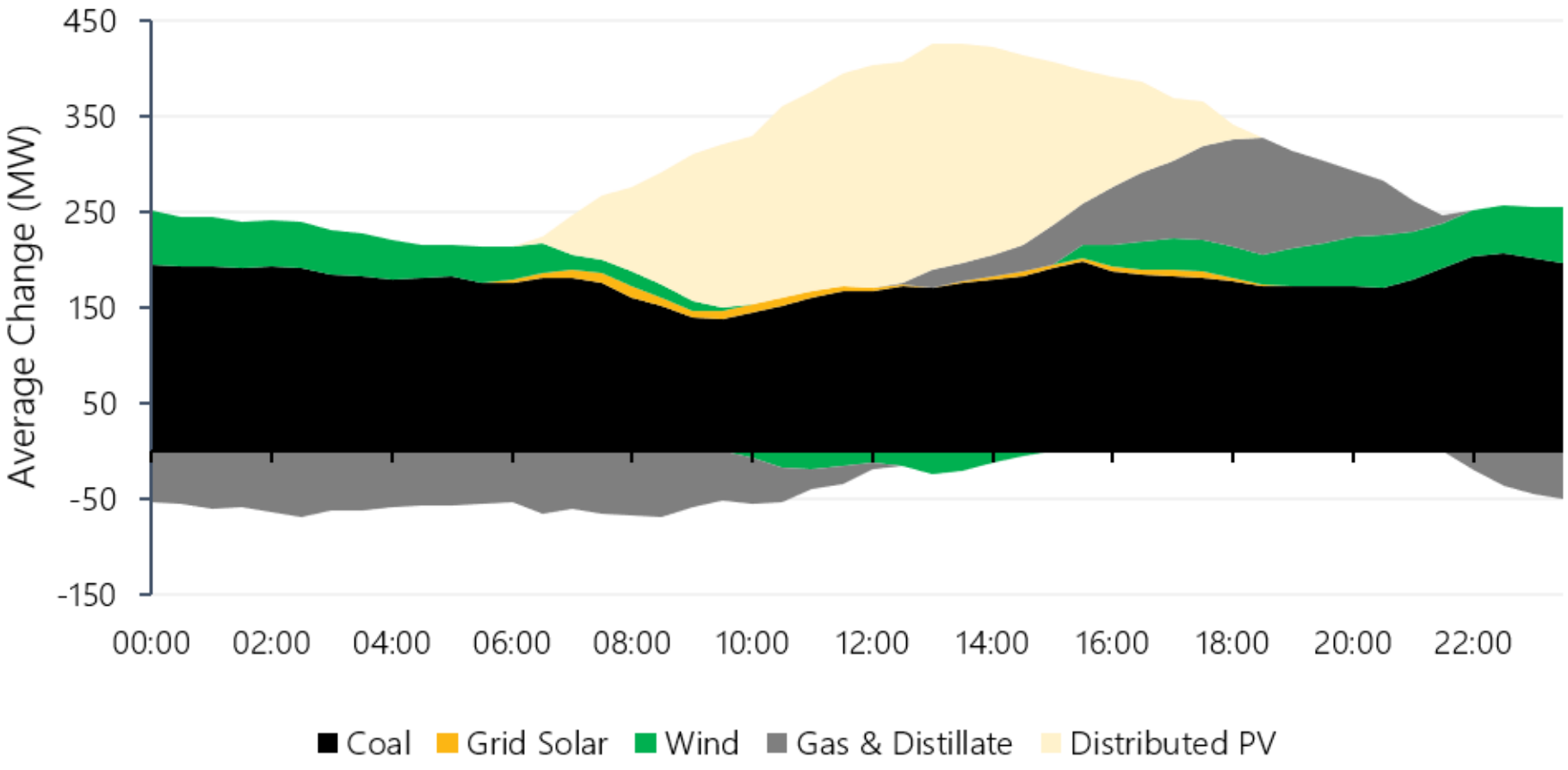

- Weighted average Balancing Price increased to $61/MWh, a 14% increase from Q4 2021
- Reduced negative price frequency, resulting in negative price impact in Q1 2022 decreasing by 30% compared to last year
- The Alternative Maximum STEM Price (AMSP) reached $635/MWh this quarter, a 13-year high, in response to recent rises in fuel prices

# WEM Prices - Balancing merit order dynamics



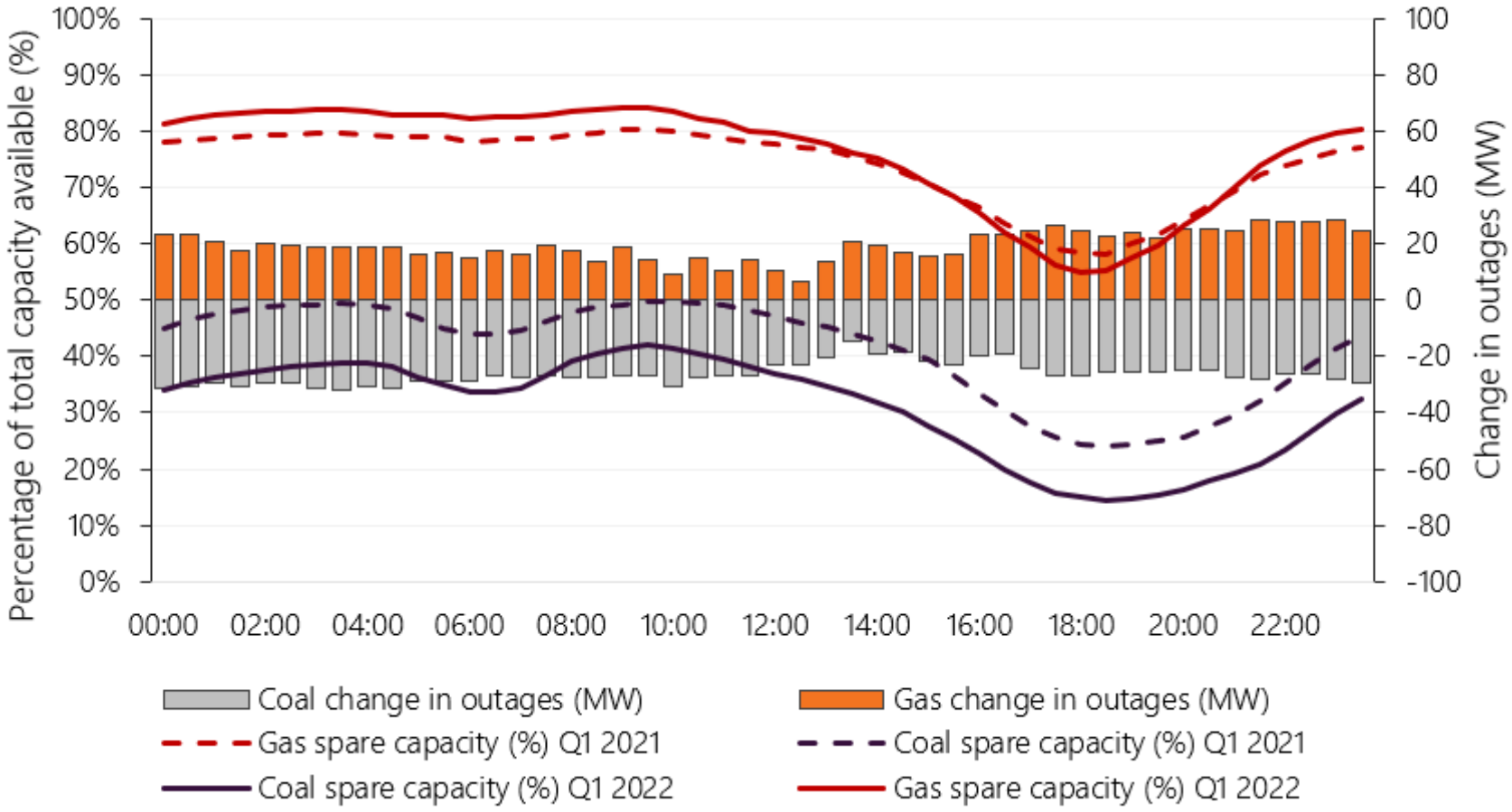

- Balancing Market offer volumes moved out of floor and ceiling price bands
- Changes to quantities offered in other price bands were varied throughout the day

# Electricity generation – Fuel mix




- Q1 2022 saw a decrease in gas and distillate powered generation at all times of the day apart from during the evening peak, with an increase in all other fuel types when compared to Q1 2021

# Electricity generation – Spare capacity analysis




- Comparing spare capacity and outages for coal and gas units between Q1 2021 and Q1 2022 shows that spare capacity was reduced in the most recent quarter, particularly during evening peak periods
- Spare capacity for coal units reduced by 10% on average, driven by higher demand

# Questions and feedback

wa.operations@aemo.com.au