

Keeping the lights on: Electricity security of supply snapshot

7 July 2025



Information to help you understand this snapshot

The Electricity Authority Te Mana Hiko is focused on making sure Aotearoa New Zealand has a **reliable and continuous power supply**, ensuring that everyone has electricity when it's needed.

To explain how well the electricity system is functioning to ensure the lights (and kettles, stoves etc) stay on, we have published a new explainer that we are calling Keeping the lights on.

Every week, we will publish a 'snapshot' of how our system is looking in terms of overall security, together with supporting information on rainfall, hydro storage, geothermal generation and wholesale electricity prices.

The graph on page 5 shows the **Electricity Risk Curves (ERCs) and national hydro storage**. The ERCs are based on how much fuel is available to generate electricity. They are designed to show how low hydro storage would need to be to cause concern about security of supply.

The black line shows where hydro storage normally is during the year, and the blue line shows how much hydro storage there has been since 2023. **You can see that it is currently at a typical level for this time of year, and is above the ERCs.**

The three maps of Aotearoa New Zealand on page 6 show **the forecast rainfall over the next 35 days**.

The winter 2024/2025 comparison chart shows 'contingent arrangements' – the amount of fuel that is stored should it be needed for power generation. There has been a significant increase in fuel available for this winter compared to last winter.

The chart on page 8 shows **the amount of power generation infrastructure 'on outage'**, which means it will not be available to generate electricity.

The chart on page 9 provides **an estimate of spot prices for this month and quarter**, based on recent prices and forward prices.

The final chart, on page 10, shows **wholesale forward prices** - the cost for purchasing electricity for a given time period in advance. They reflect expectations of future electricity demand and generation costs.

This week's snapshot

This week's data shows that national hydro storage is now slightly above average, having increased significantly over the past few weeks.

Forward prices for the next month are currently around \$130/MWh, on average, as there is currently enough energy (stored coal, water and gas) in the power system to get through the winter.

Forward prices for the September Quarter are around \$137/MWh at Ōtāhuhu and \$122/MWh at Benmore.

It is important to understand there are different drivers of wholesale and retail price decreases. The current wholesale prices decreases are driven by recent increases in hydro and gas storage levels.



Summary of overall electricity system risk for the next three months

Forward prices

Future prices are currently around ~130/MWh for September quarter

Security of supply (energy)

Overall risk to national energy supply is significantly lower than last winter

Security of supply (capacity)

Transpower's NZ Generation Balance shows no days where capacity will be a problem

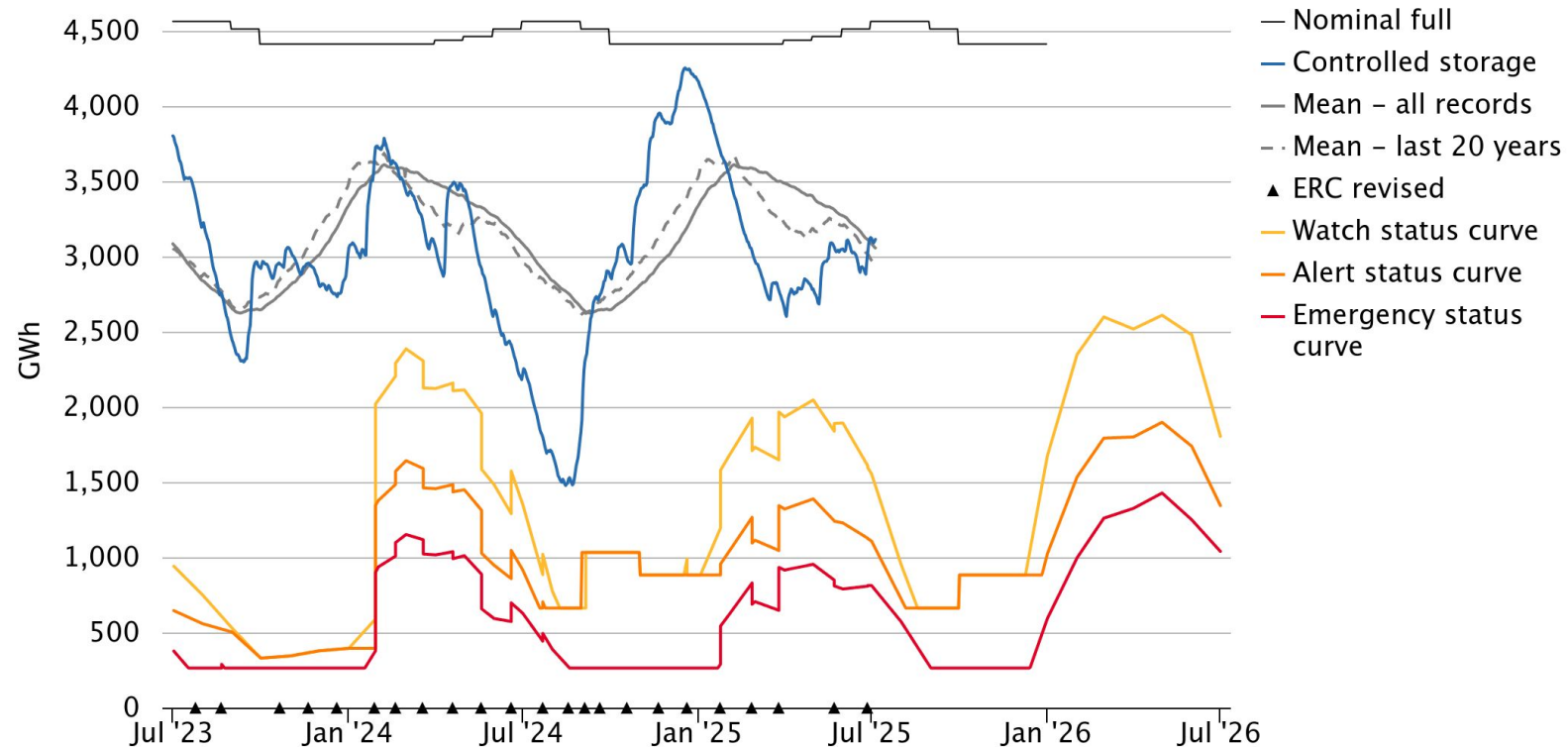
Security of supply outlook for the next three months:

Hydro storage may continue to remain at or drop slightly below average, but has increased considerably over the last few weeks, meaning less pressure on wholesale prices. Fuel supply and generation capacity will be sufficient to meet national demand.

Electricity market information in this snapshot:

- New Zealand Electricity Risk Status Curves (Available GWh)
- 35-day rainfall forecast
- Winter 2024/2025 comparison
- Planned maintenance shut-downs of power generation infrastructure
- Forecast wholesale electricity spot prices
- Forward curve – average future wholesale electricity price.

New Zealand Electricity Risk Status Curves (Available GWh)



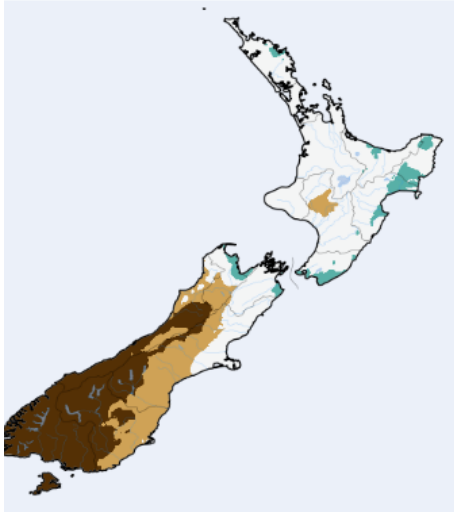
emi.ea.govt.nz/r/4upzj

This chart shows that national hydro storage remains above the risk curves. A substantial increase over the past few weeks means national hydro storage is now just above the historic mean.

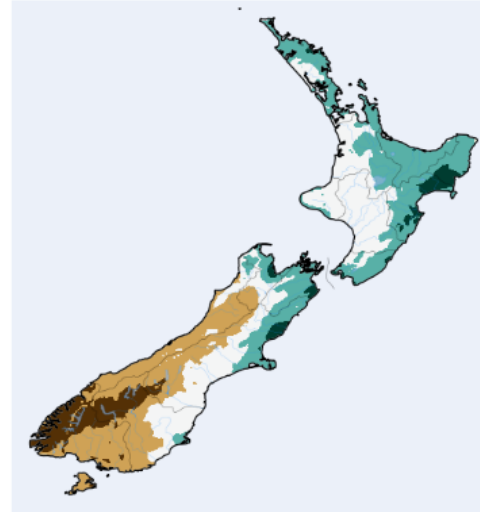
Source: Transpower as the system operator

35-day rainfall forecast

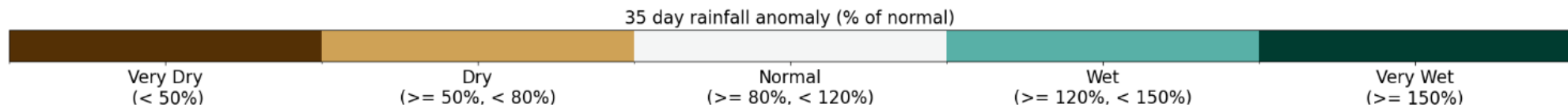
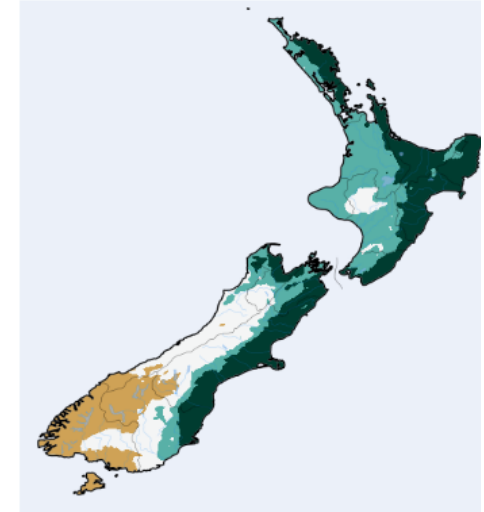
Drier scenario (25th percentile)



Middle scenario (50th percentile)



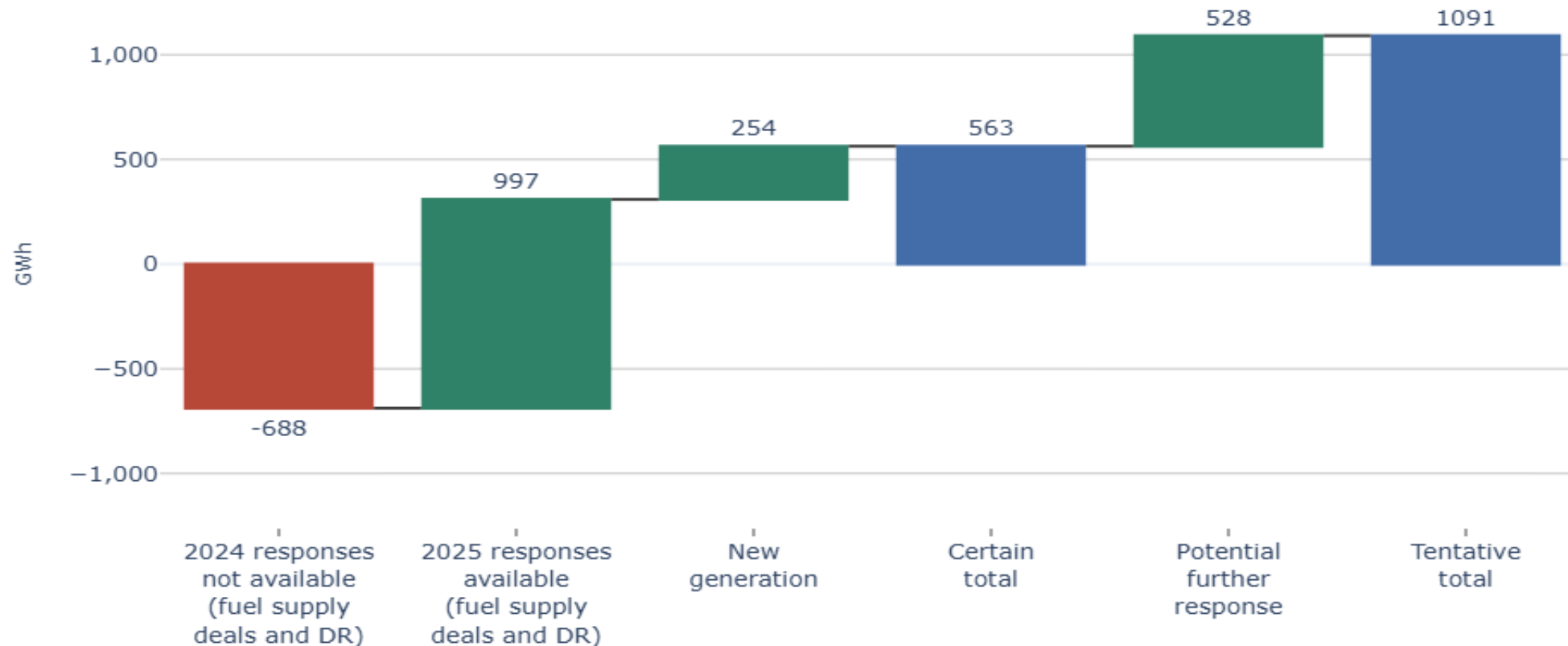
Wetter scenario (75th percentile)



These maps show that this week's forecast is that rainfall is likely to be drier than normal over the next 35 days for most of the South Island where the main hydro catchment areas are located.

Source: NIWA

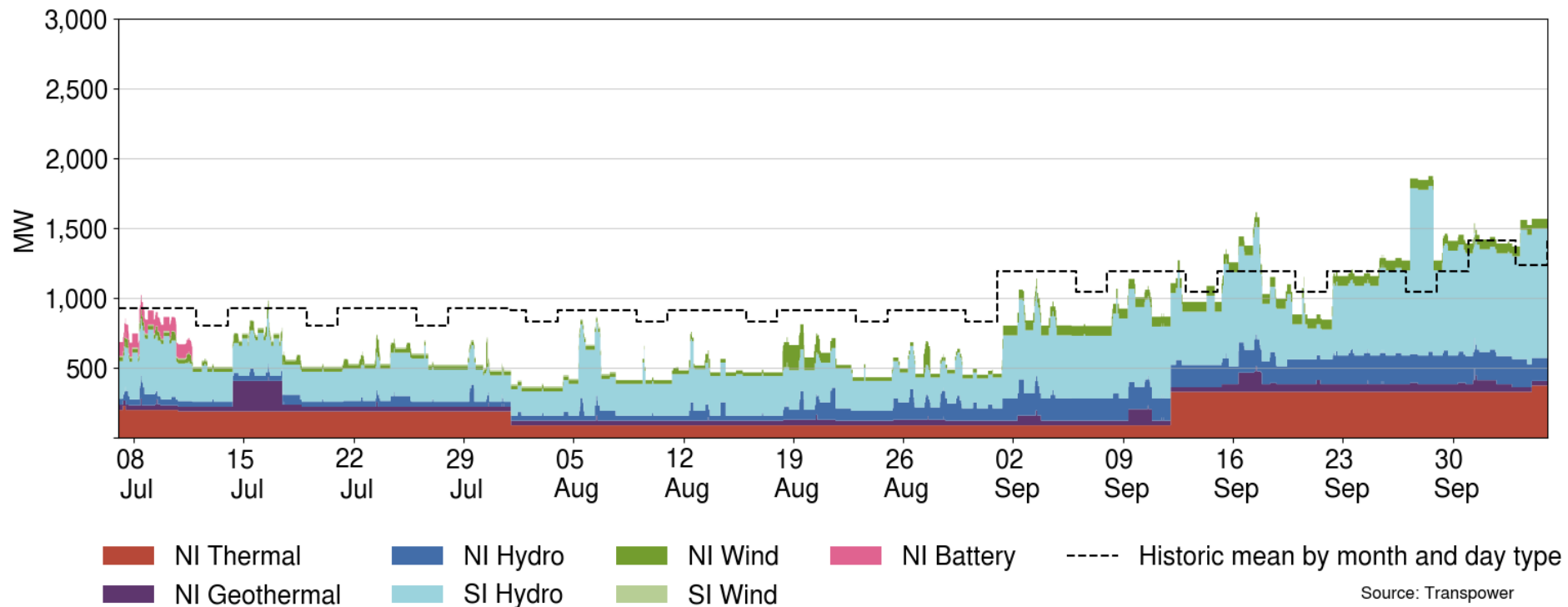
Winter 2024/2025 comparison



Source: Electricity Authority

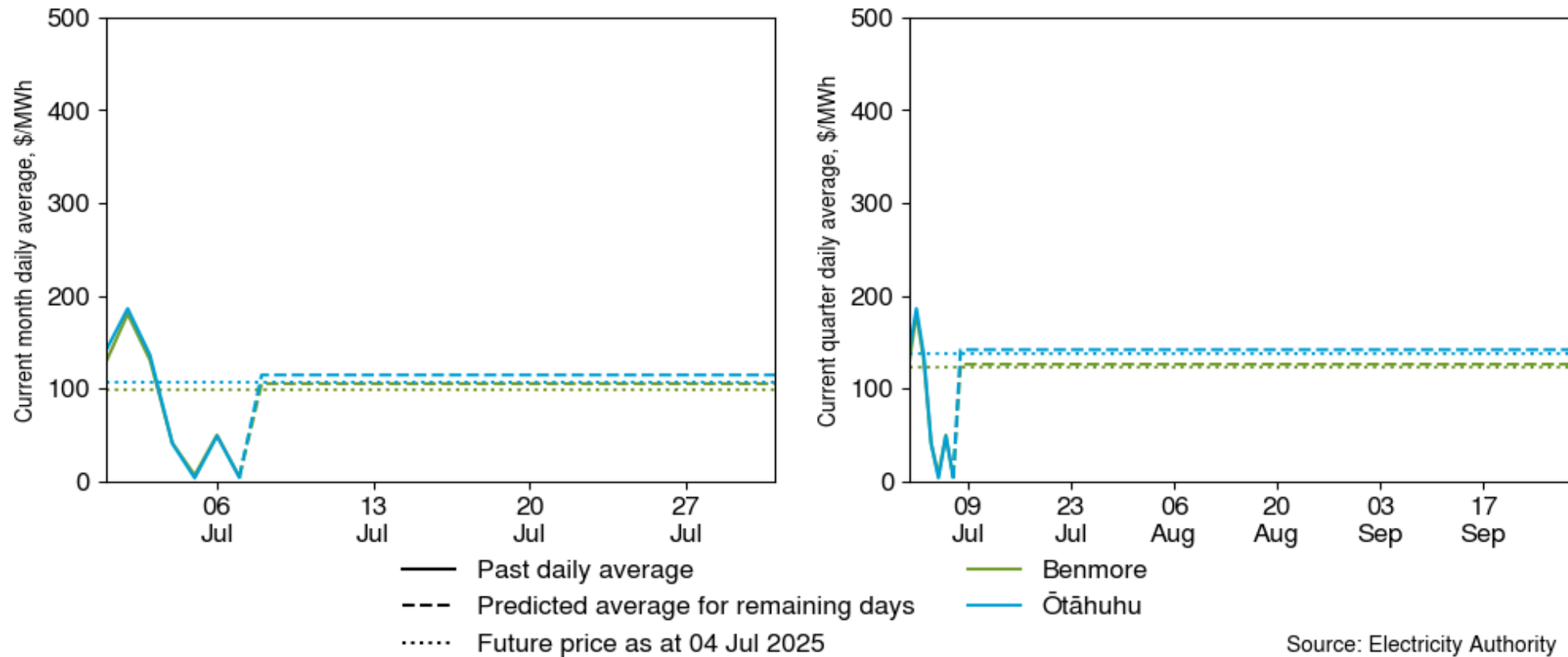
This chart shows that 'contingent arrangements' (fuel stored in case it's needed for power generation) is higher than it was in 2024. This reduces risk for this winter compared to last year, contributing to a total net improvement of 1,091GWh.

Planned maintenance shutdowns of power generation infrastructure – by infrastructure type



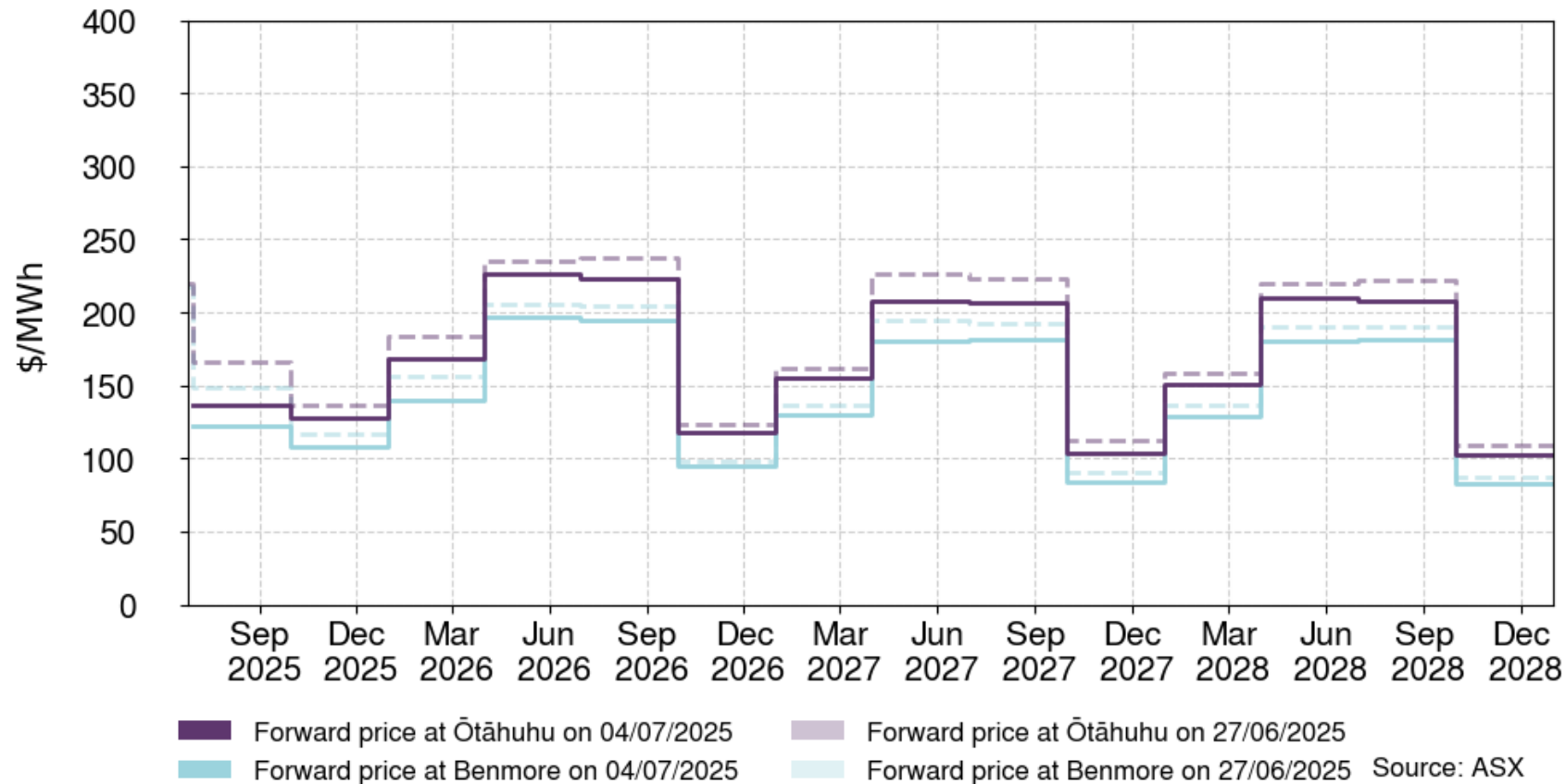
This chart shows that the amount of power generation infrastructure 'on outage' (shut down for planned maintenance) over the next three months is expected to be below average on most days.

Wholesale electricity spot prices



Future prices are currently averaging ~\$130/MWh for the September quarter across Ōtāhuhu and Benmore. The prices reflect the underlying supply conditions, with recent improvements in hydro storage levels and more gas available.

Forward curve – average future wholesale electricity price



This chart shows that the average future wholesale price for September 2025 is currently \$137/MWh at Ōtāhuhu and \$122/MWh at Benmore, representing a decrease of around \$29/MWh at Ōtāhuhu and \$26/MWh at Benmore. December prices decreased around \$9/MWh.

Find more information
at yourpower.co.nz