Weekly electricity security of supply snapshot

1 September 2025

ELECTRICITY AUTHORITY
TE MANA HIKO

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 below the 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 continues to fall and remains below the historic average. It has roughly followed the historic average over the past few weeks, but last week saw significant hydro generation to meet high demand as temperatures dropped. Storage is just below average. This means that there is a risk that spot prices will be volatile until we get significant hydro inflows.

September quarter 2025 futures prices are around $145/MWh at Ōtāhuhu and $139/MWh at Benmore. There is currently enough energy (stored coal, water and gas) in the power system to get through the winter.

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

Summary of overall electricity system risk for the next three months

Wholesale prices

Average daily prices are likely to be around $149/MWh for the rest of the 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

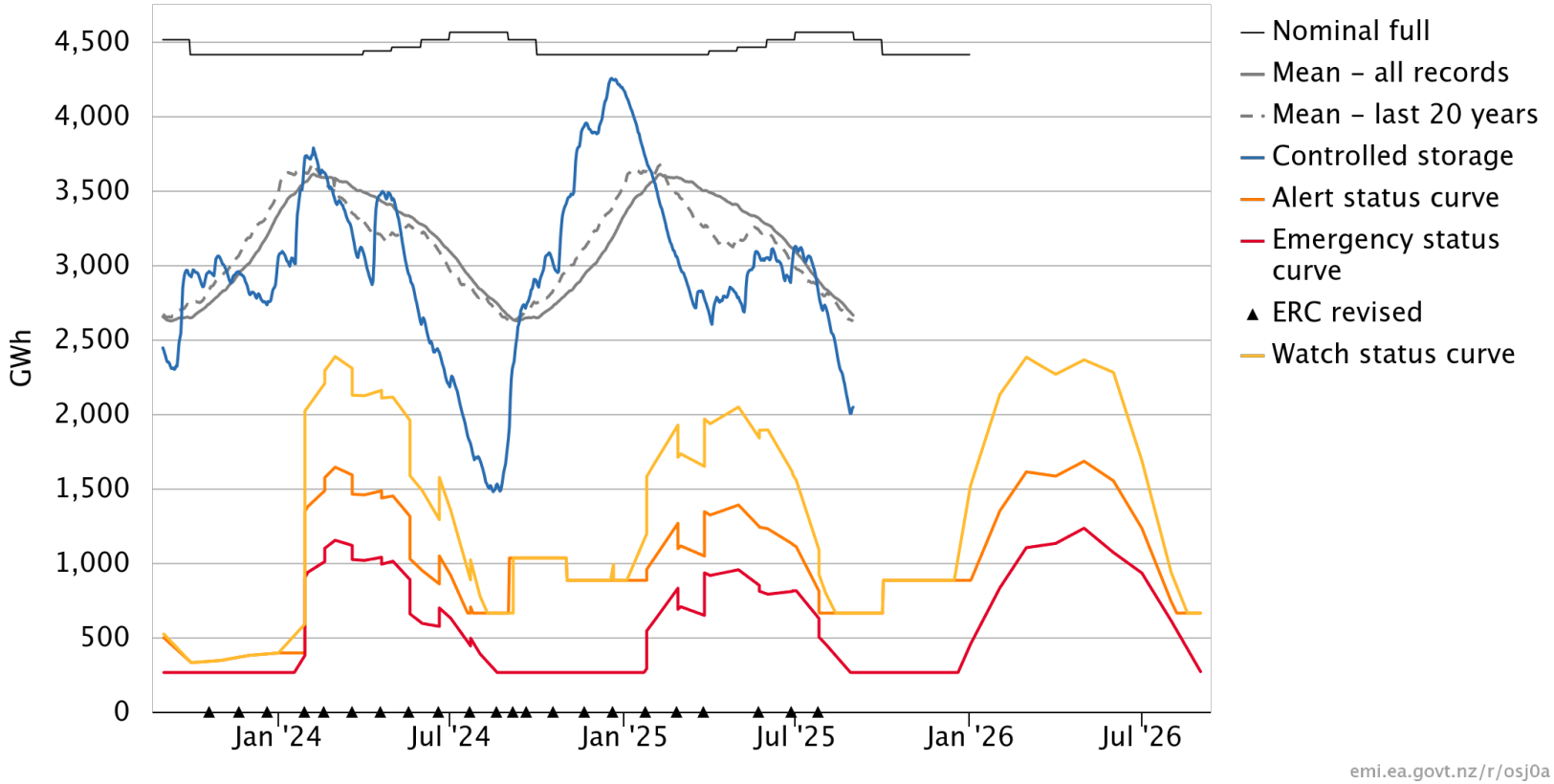
Security of supply outlook for the next three months:

Hydro storage has dropped below average, but remains above the risk curves. This means there is a risk that spot and forward prices could be volatile until we get significant hydro inflows. Storage may continue to decrease as we progress through the second half of winter, however as spring nears it is likely to increase again. Historically storage has tended to increase from late September. 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 prices

New Zealand Electricity Risk Status Curves (Available GWh)

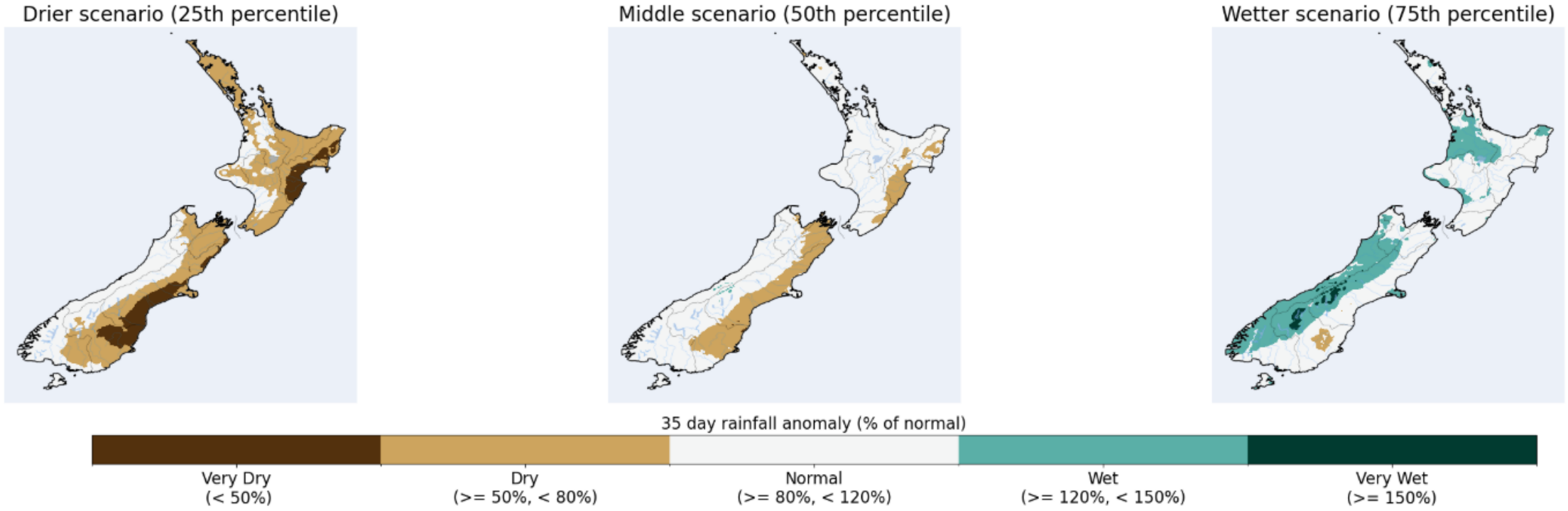


emi.ea.govt.nz/r/osj0a

This chart shows that national hydro storage remains above the risk curves. As of 30 August, hydro storage had declined from the previous week to 77% of mean.

Source: Transpower as the System Operator

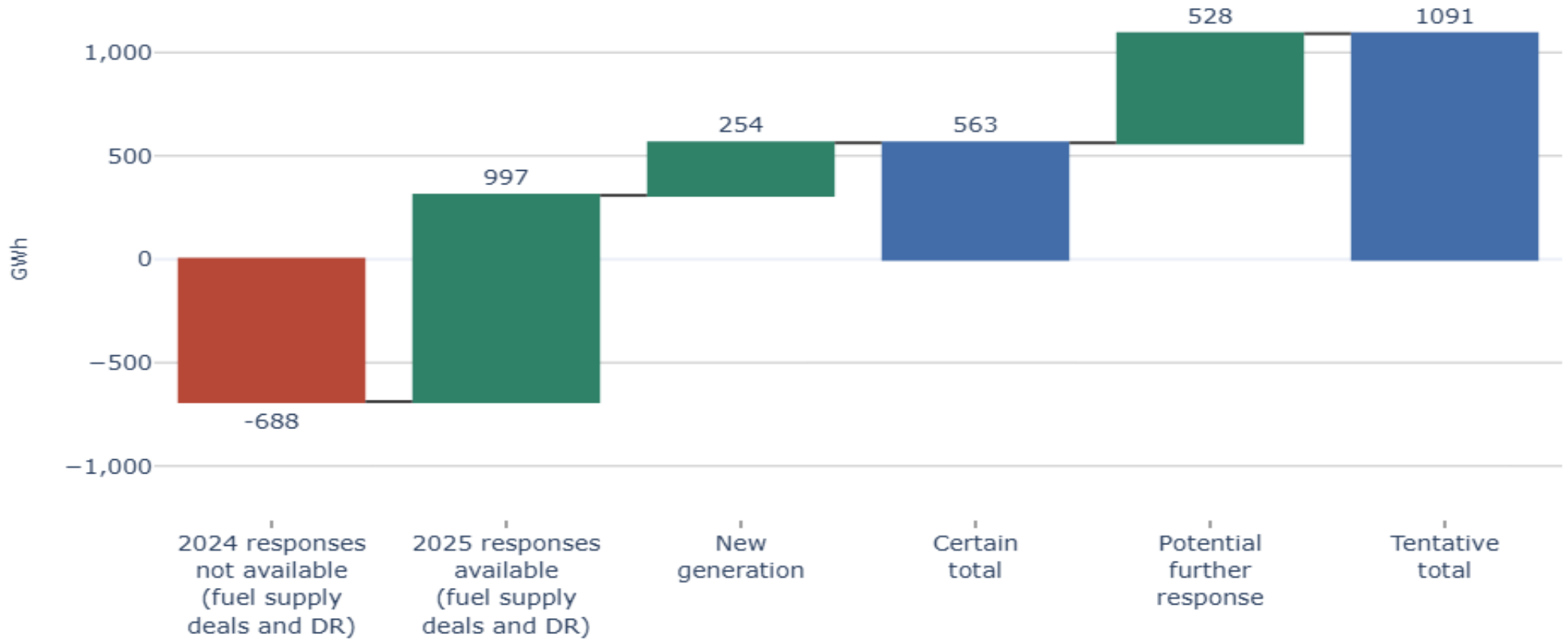
35-day rainfall forecast



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

Source: NIWA

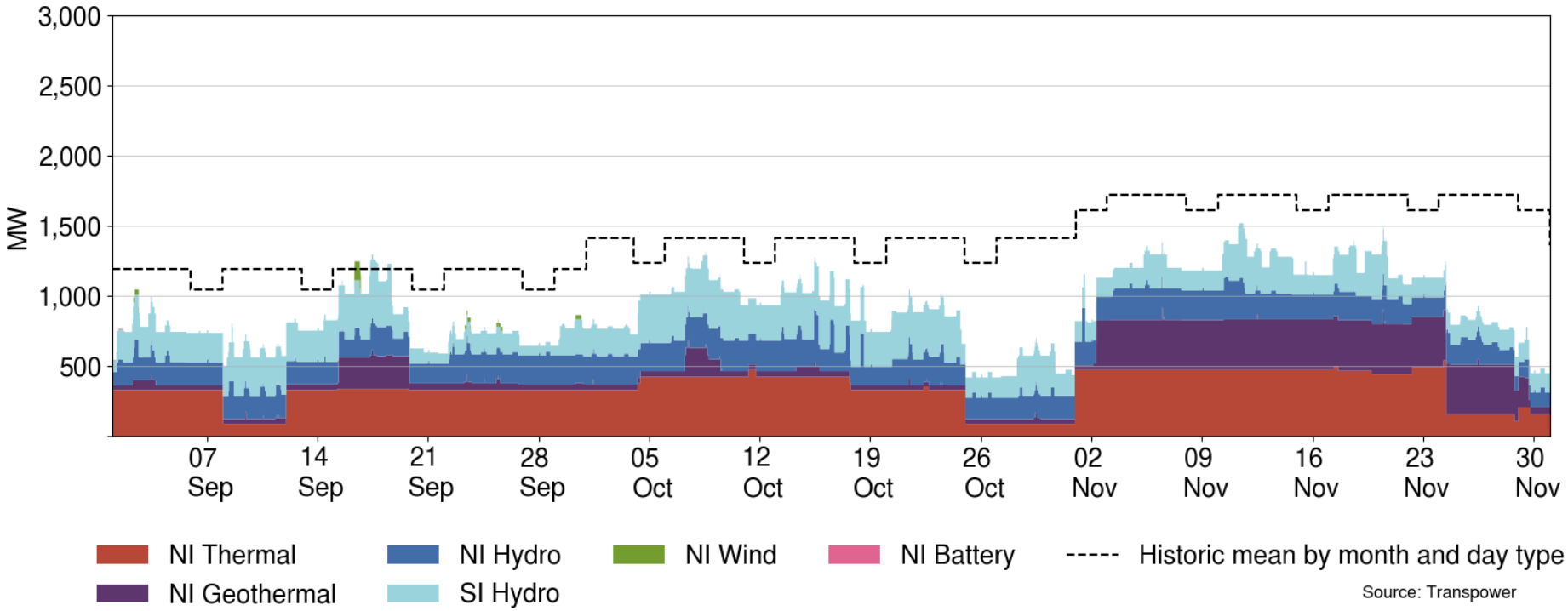
Winter 2024/2025 comparison



Source: Electricity Authority

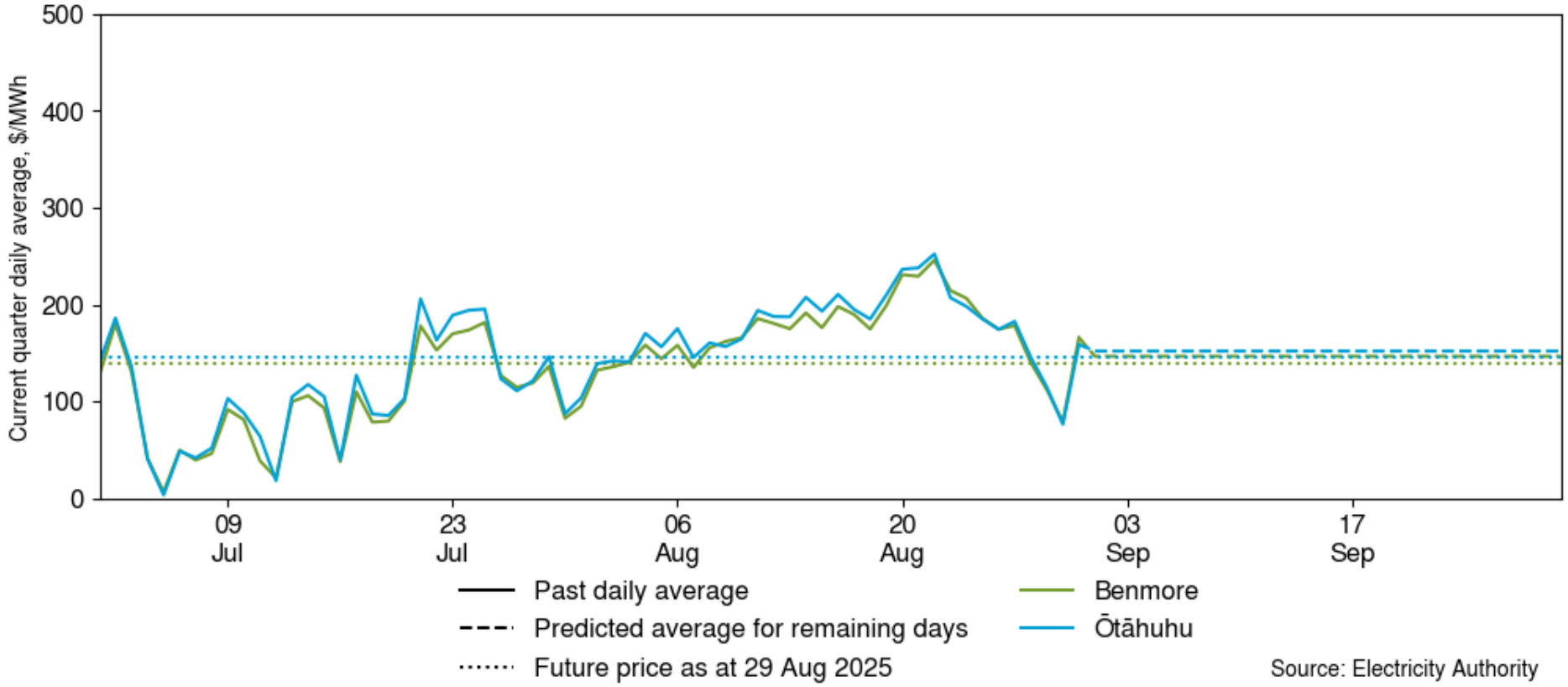
This chart shows that ‘contingent arrangements’ (fuel stored in case it’s needed for power generation) is higher than it was in 2024. This reduces risk for this winter compared to last year, contributing to a total net improvement of 1,091GWh.

Planned maintenance shut-downs of power generation infrastructure – by infrastructure type



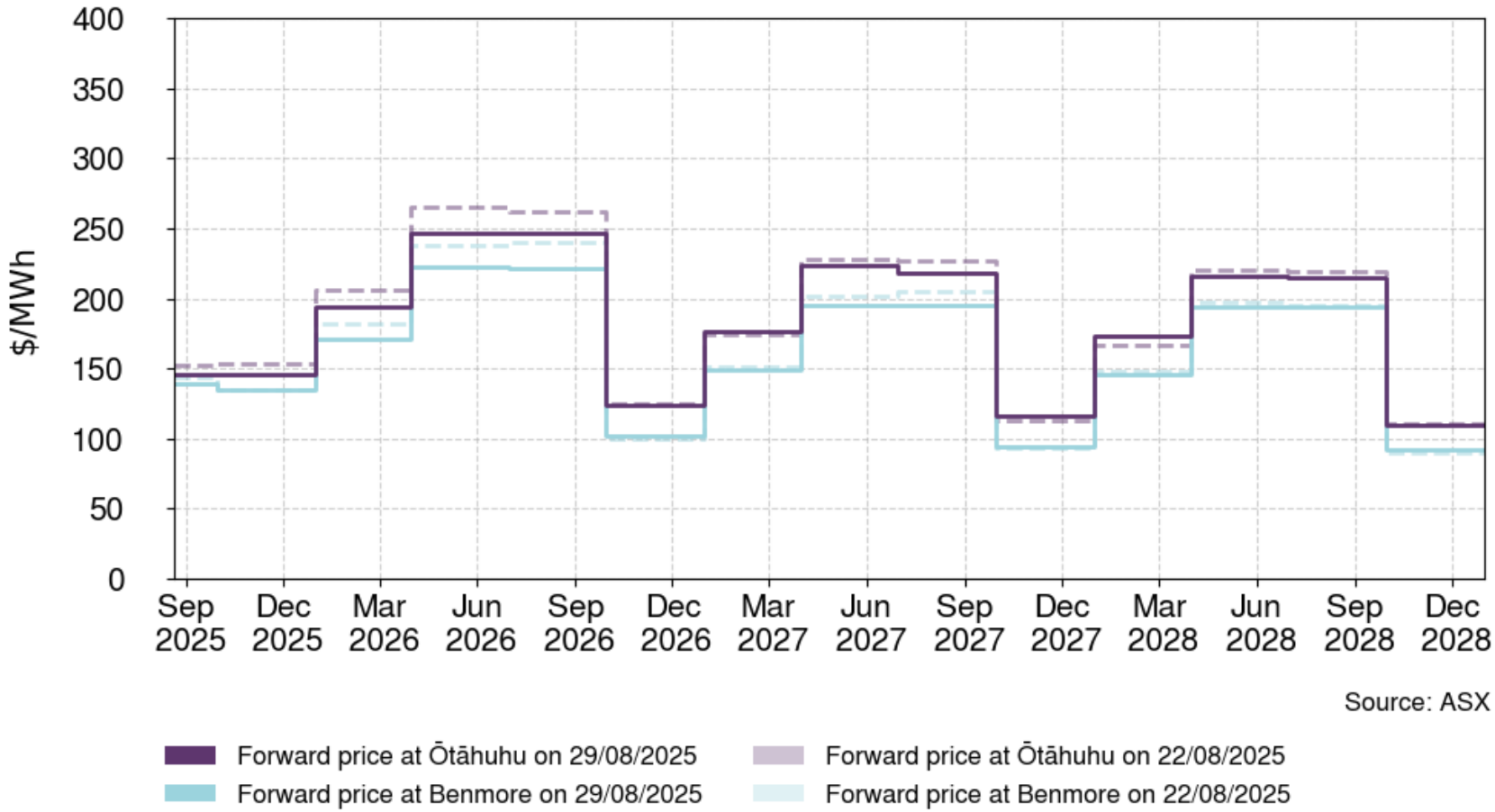
This chart shows that the amount of power generation infrastructure 'on outage' (shut down for planned maintenance) is expected to be below average over the next three months.

Wholesale electricity spot prices



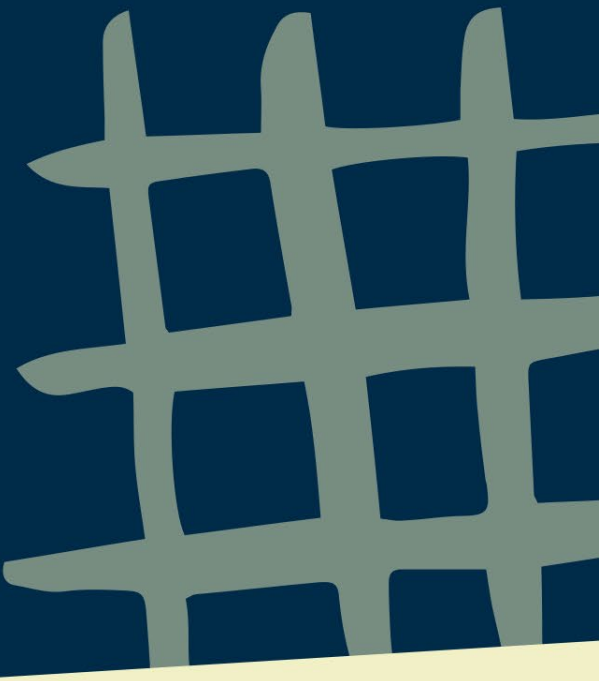
This chart shows that the forecast daily average wholesale spot prices are around ~$149/MWh for this quarter. The prices reflect the underlying supply conditions, with below average hydro storage levels.

Forward curve – average future wholesale electricity price



This chart shows that the average future wholesale price for Sept 2025 is currently $145/MWh at Ōtāhuhu and $139/MWh at Benmore, representing an decrease of around $8/MWh and $5/MWh respectively.

Find more information at yourpower.co.nz



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