



Market Operations Weekly Report - Week Ended 18 October 2026

Overview

National hydro storage remained below the 90th percentile last week, decreasing from 121% to 119% of the historic mean for this time of year but remains healthy and above average. Solar generation broke yet another record on Sunday 18 October.

In this week's insight we look at the impact of El Niño on national hydro storage.

Security of Supply Energy

National hydro storage decreased to 119% of the historic mean from 121% the week prior reflecting lower hydro generation last week. South Island storage decreased from 129% to 126% while North Island storage increased from 75% to 76%.

Capacity

Residual generation was healthy last week. The lowest residual was 602 MW in the evening of Monday 12 October.

The N-1-G margins in the NZGB forecast are at healthy levels through to mid December. Within seven days we monitor these more closely through the market schedules. The latest NZGB report is available on the [NZGB website](#).

Electricity Market Commentary

Weekly Demand

Total demand increased last week to 764 GWh from 755 GWh the week prior. The highest demand peak occurred at 8:00 am on Friday 16 October at 5,849 MW during a particularly cold snap.

Weekly Prices

Wholesale electricity spot prices increased last week with the average Ōtāhuhu price up at \$60/MWh from \$35/MWh the previous week. Prices peaked at \$299/MWh at 8:00 pm on Monday 5 October.

Periods of inter-island energy price separation occurred throughout the week during periods of high HVDC northward transfer.

Generation Mix

Wind generation increased last week from 7.5% to 11.5% of the mix offsetting hydro which dropped from 65% to 60%. The remaining mix stayed consistent last week from the week prior.

Solar and wind generation were both above average at 2.9% and 11.5% of the mix respectively while thermal and geothermal were both below average at 1.8% and 22.2% of the mix.

HVDC

HVDC flows last week were entirely northward consistent with recent transfer patterns. In total 113.5 GWh was transferred north.

Consultations

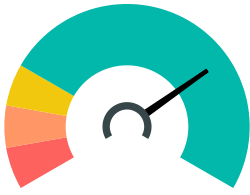
We are consulting on the [TSO:DSO coordination: operations requirements paper](#). Please send your feedback by email to system.operator@transpower.co.nz by 5pm on Friday 6 November 2026.

Ancillary Services Tender

The 2026 Ancillary Services tender is now open. The System Operator invites tenders for the provision of Over-Frequency Reserve and South Island Black Start services.

Tender responses are due by 5:00 pm on 3 November 2026 via the System Operator portal [here](#). Successful respondents will be offered contracts commencing 1 January 2027. Any questions about the tender process can be sent to system.operator@transpower.co.nz.

New Zealand Energy Risk

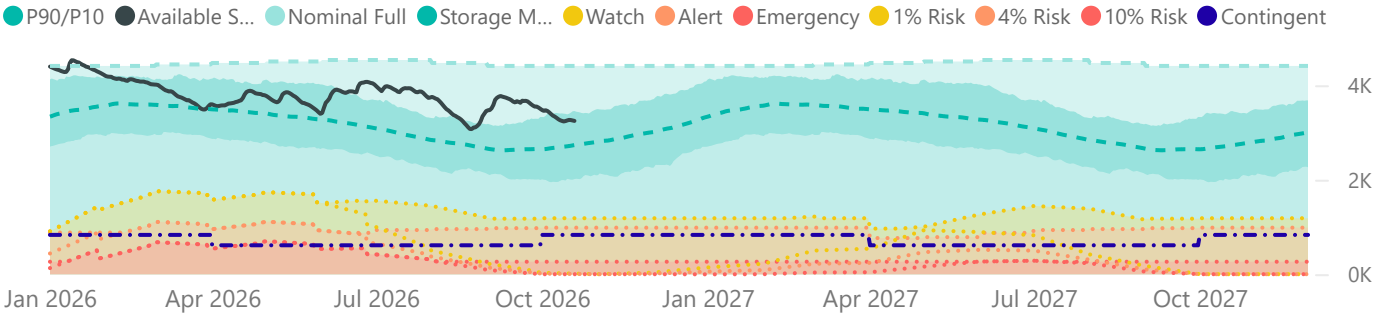


South Island Energy Risk

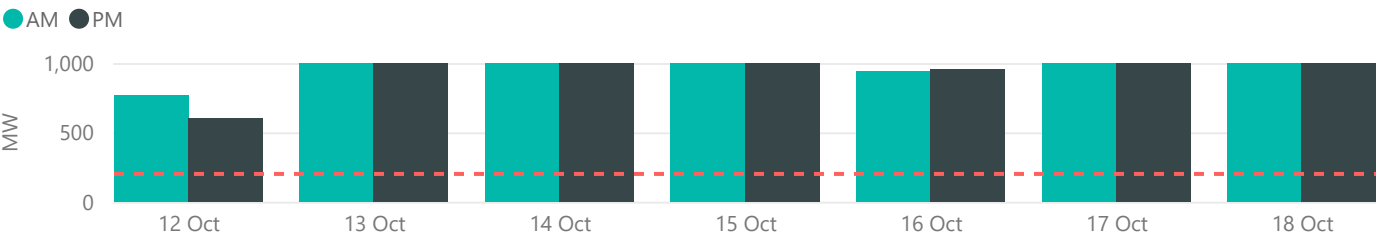


Normal Watch Alert Emergency

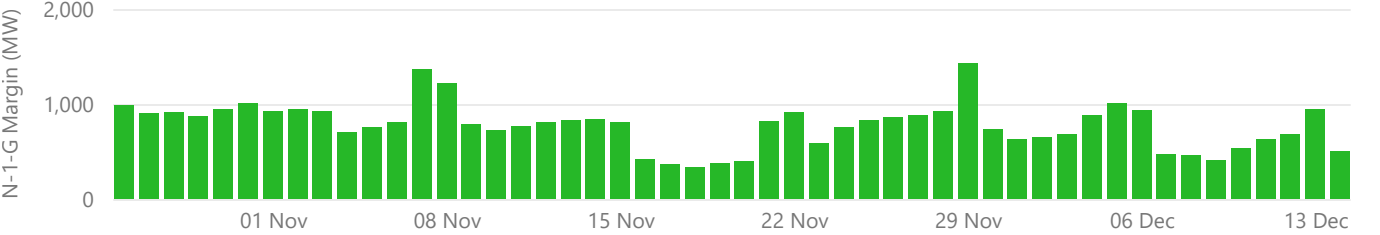
New Zealand Electricity Risk Status Curves (Available GWh)



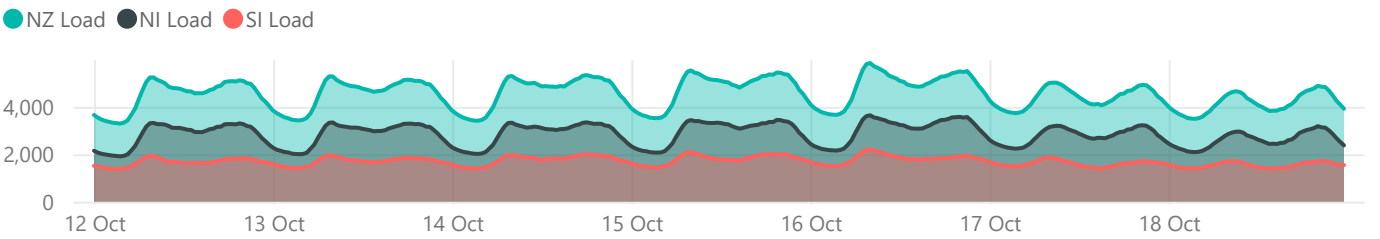
Lowest Residual Points - MW



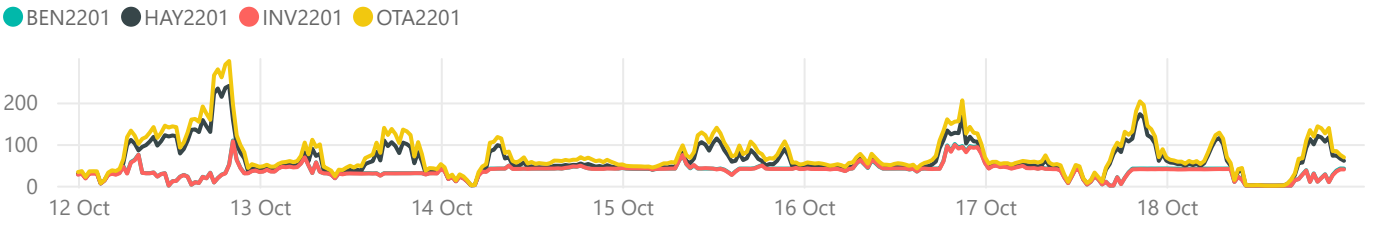
NZGB Look-Ahead (excluding next 7 days)



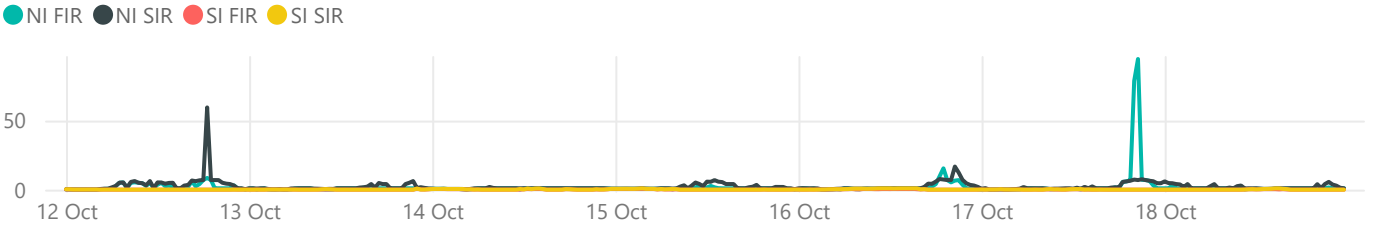
National Demand by Trading period - MW



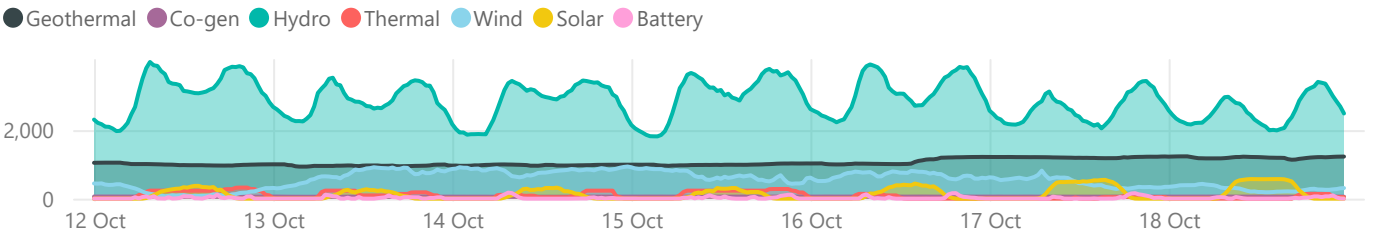
Energy Prices - \$/MWh



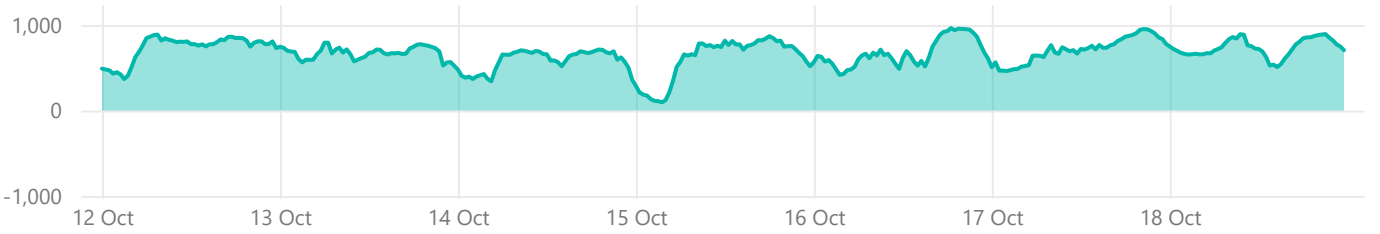
Reserve Prices - \$/MW

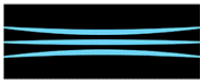


Generation - MW



Net HVDC Transfer - MW (Northward positive)





Weekly Insight - The impact of El Niño on national hydro storage

El Niño-Southern Oscillation (ENSO) is a natural climate pattern involving interchangeable warming (El Niño) and cooling (La Niña) of central and eastern tropical Pacific Ocean surface waters which influences global weather patterns. The pattern oscillates irregularly every 2-7 years.

During an El Niño event, easterly winds along the equator weaken or reverse allowing warming of the sea surface temperatures in the central and eastern tropical Pacific Ocean. This warming brings increases in rainfall further east than under normal climatic conditions.

Typical weather patterns in Aotearoa during an El Niño event include:

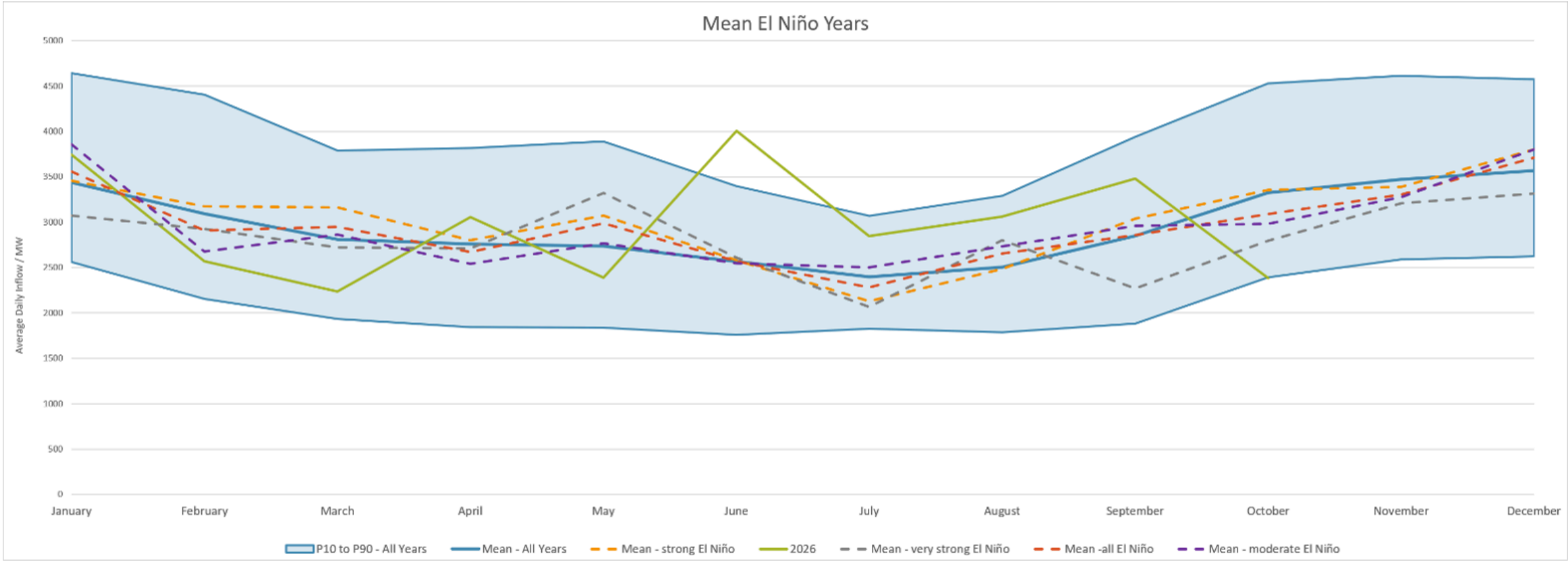
- increased south-westerly winds in spring
- increased westerly winds in summer resulting in:
 - more frequent fronts bringing wetter weather in the west and southern parts of the country
 - drier, warmer conditions in eastern areas.

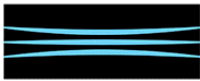
NIWA's recently released [climate outlook](#) details the forecast outlook for the next three months. Currently, Aotearoa is experiencing the effects of very strong El Niño conditions in the tropical Pacific with El Niño conditions expected to peak in late spring or early summer. There is the potential for significant impacts with this event likely to rank among the strongest on record.

The strong El Niño weather patterns are likely to result in increased rainfall in the west coast of the South Island and warmer than usual temperatures across the country albeit with more variability than usual.

History shows that inflows depend on the specific catchment and the season. Stronger westerly flows associated with El Niño have frequently delivered more moisture to Fiordland and the southwest South Island and therefore the Waiau catchment. Waitaki catchment inflows can be variable because the headwaters are influenced by alpine precipitation patterns rather than just local rainfall. In the North Island, Lake Taupō has experienced reduced inflows but even under El Niño conditions, individual weather systems can bring rain.

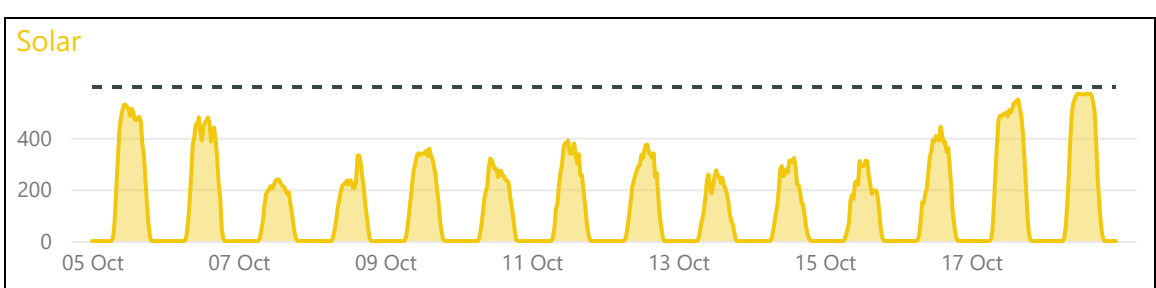
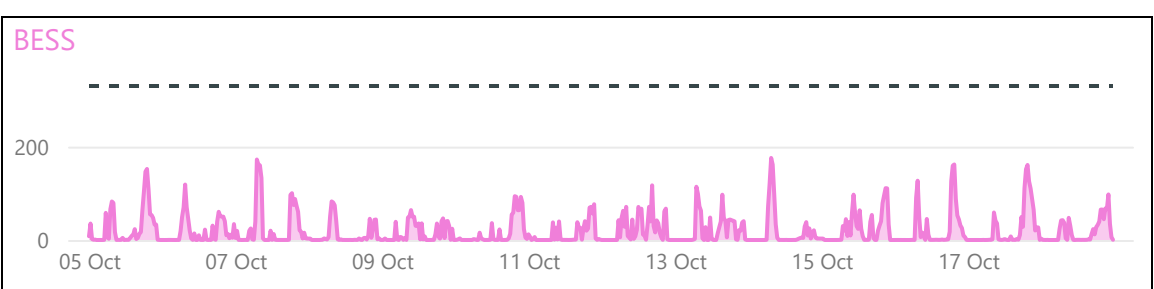
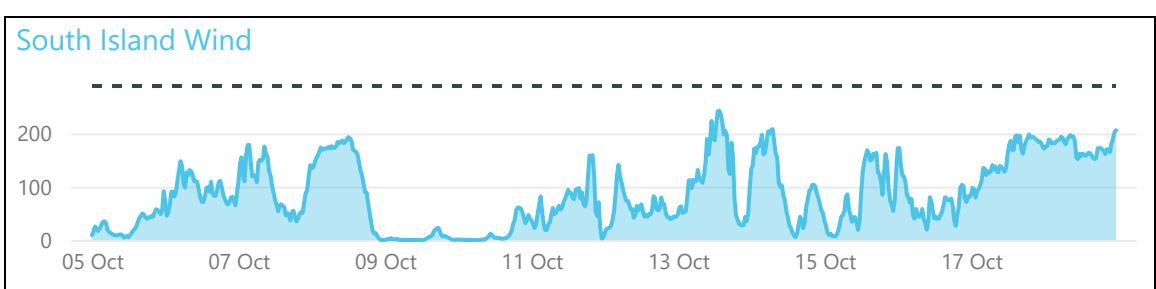
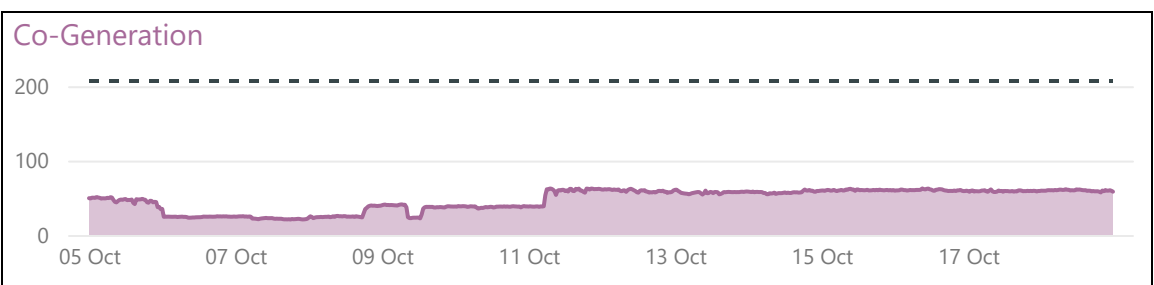
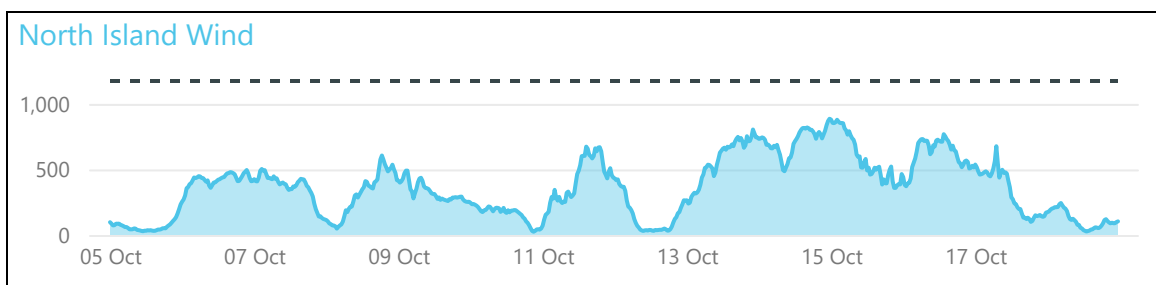
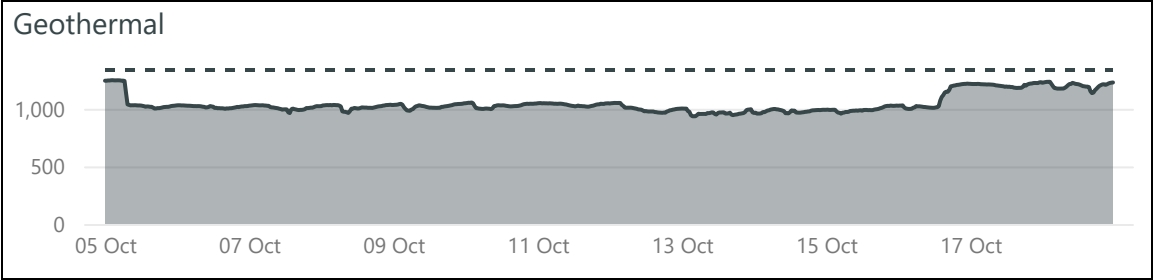
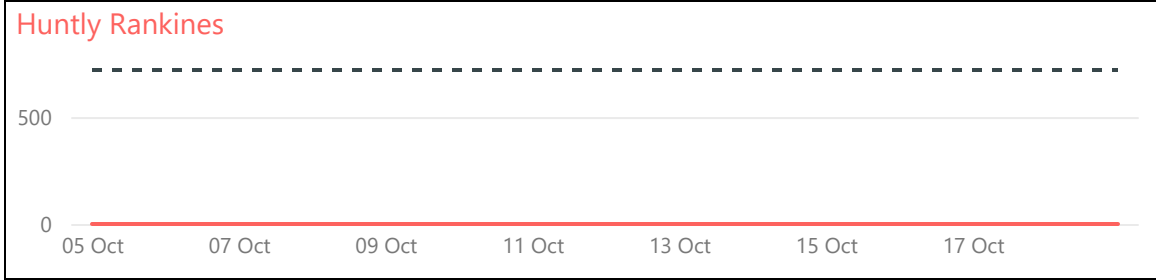
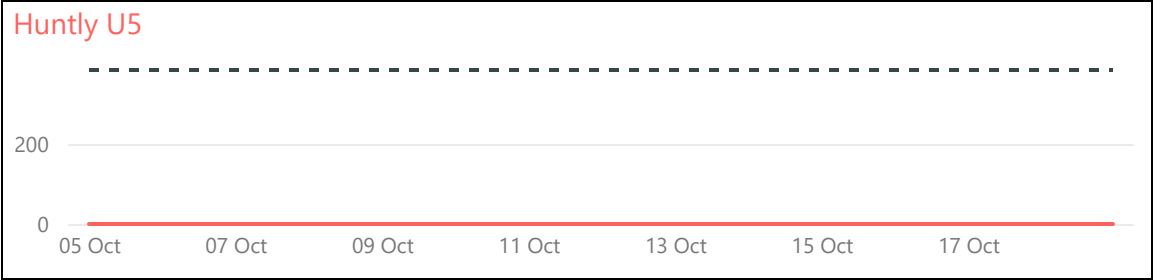
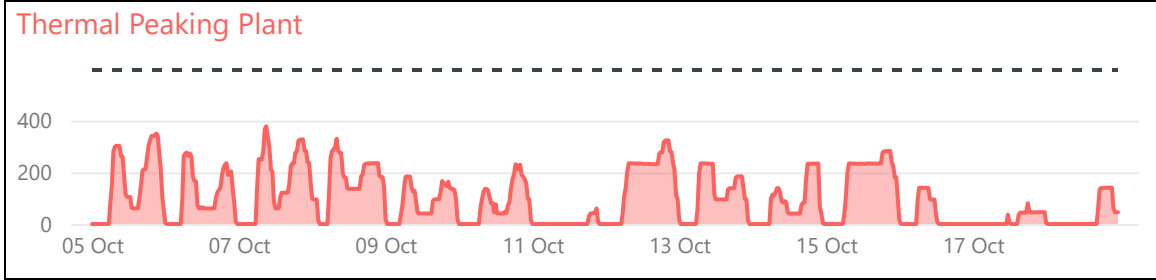
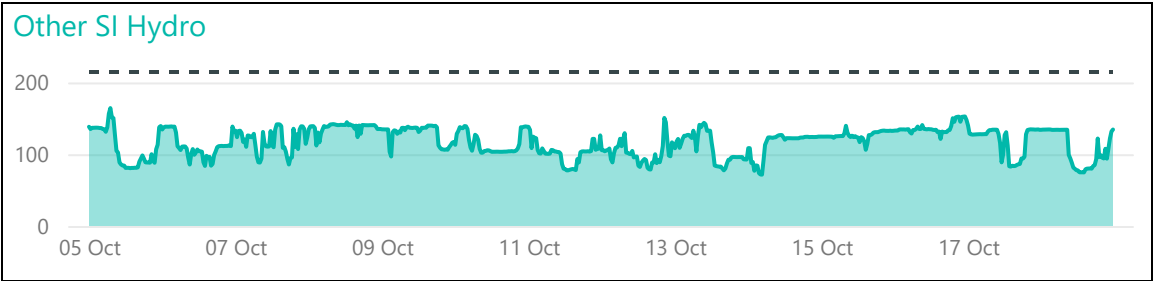
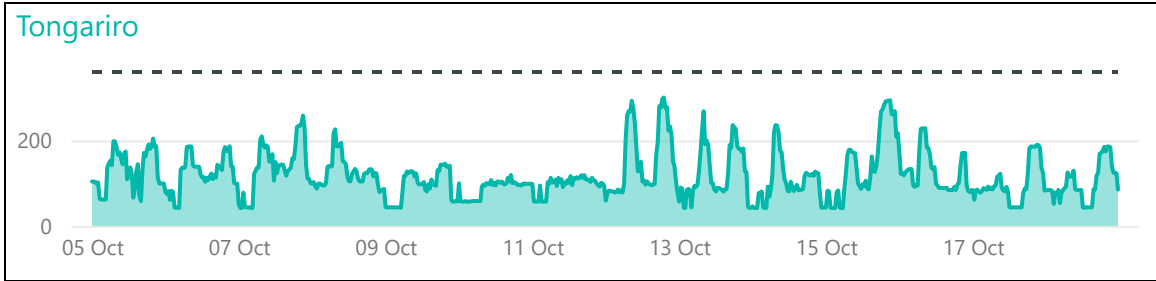
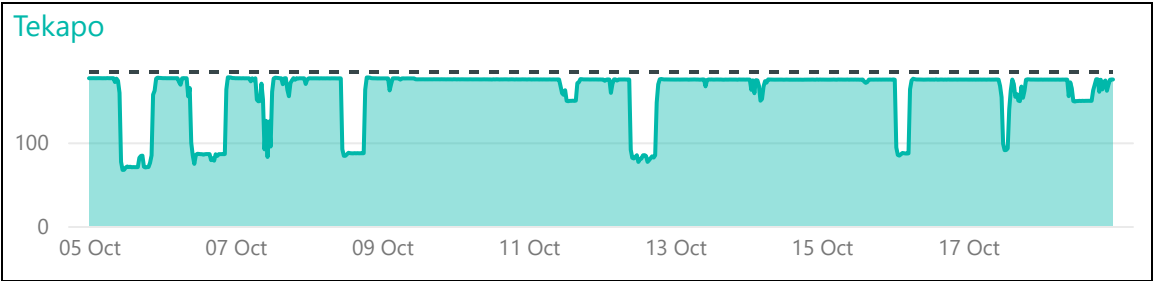
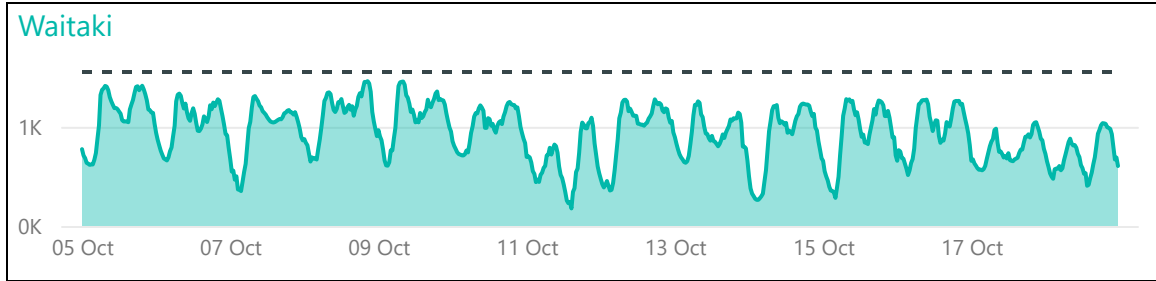
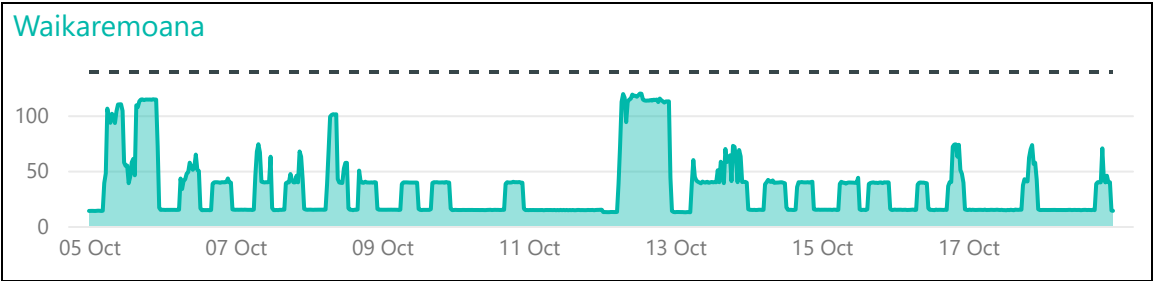
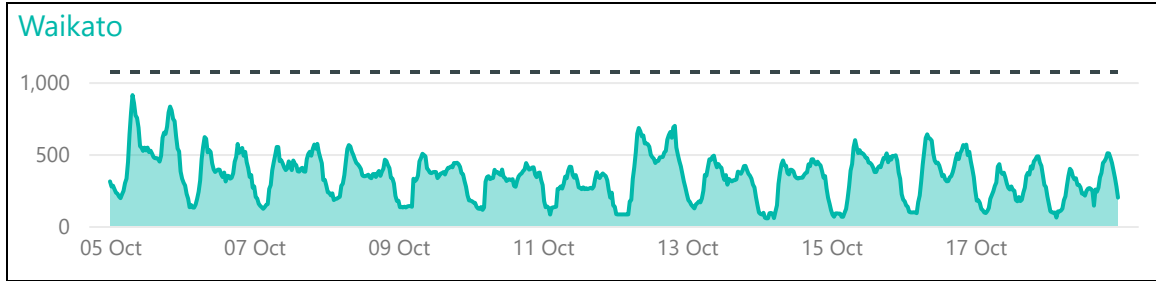
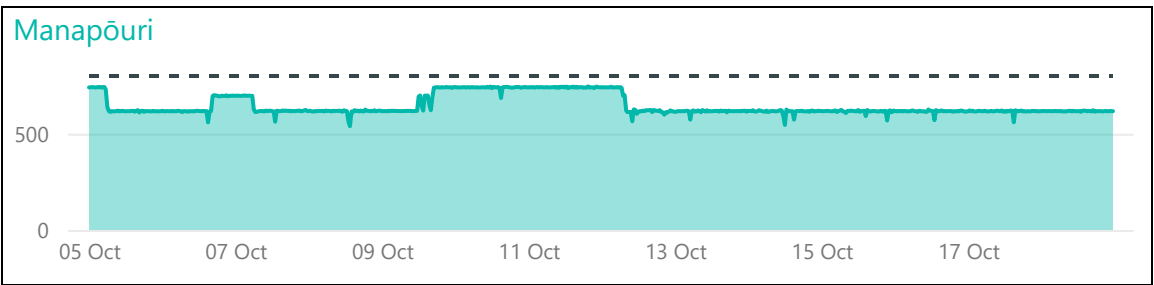
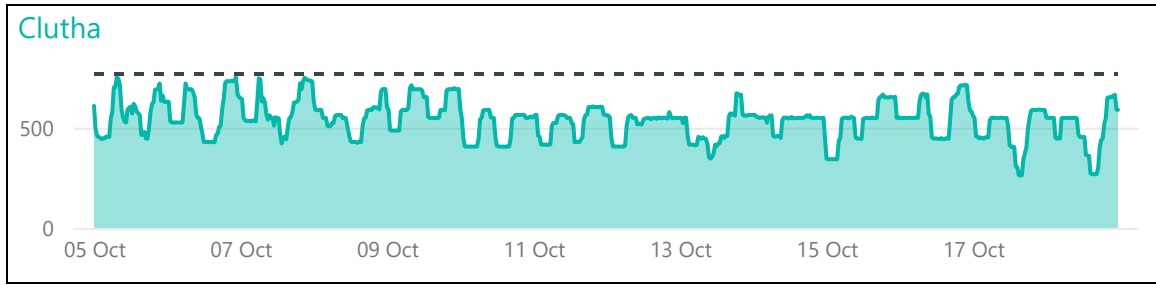
The figure below shows how inflows in previous El Niño years including strong, very strong and moderate El Niño years compared with average inflows this year to date.

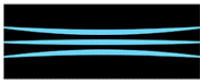




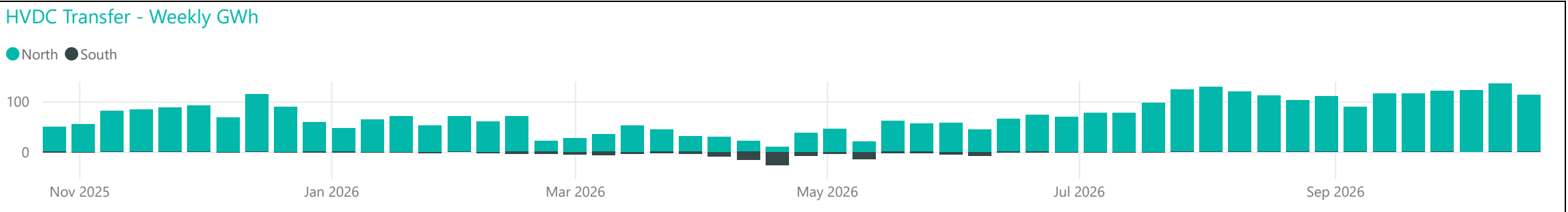
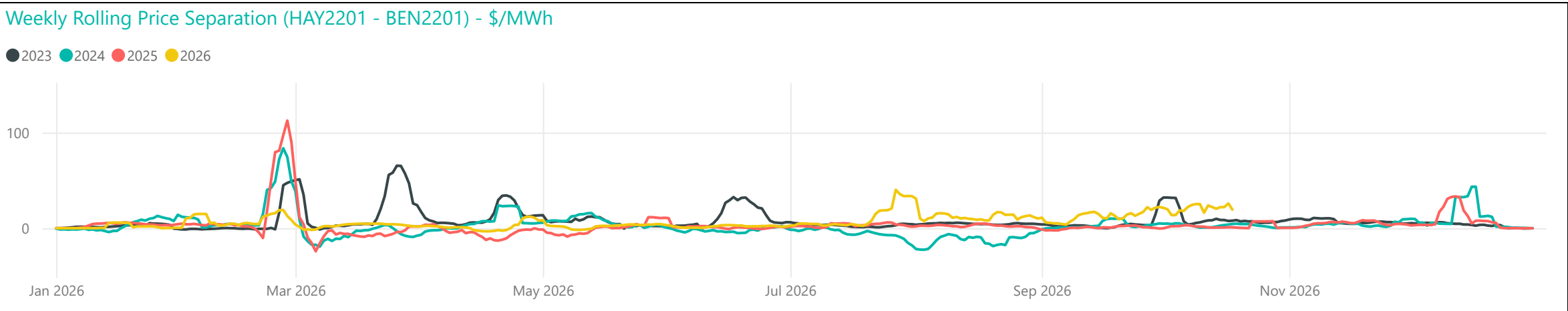
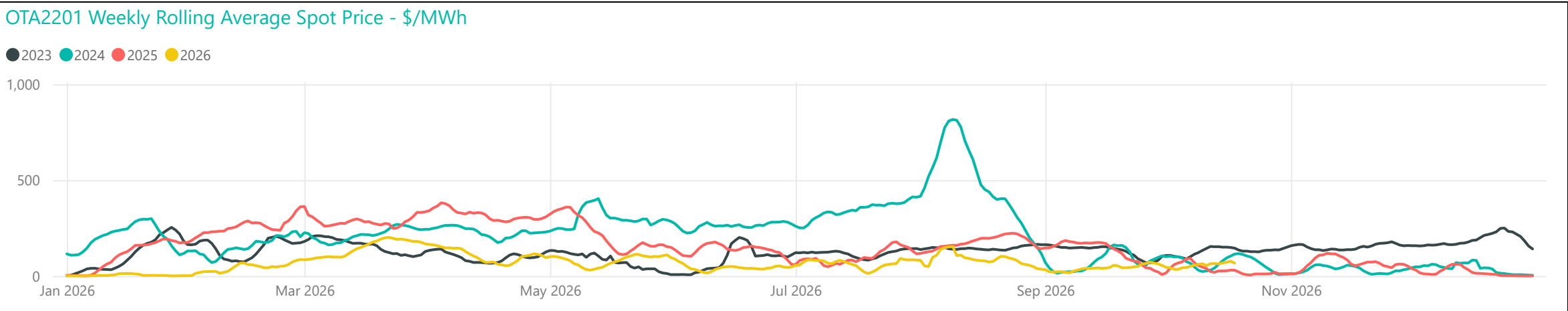
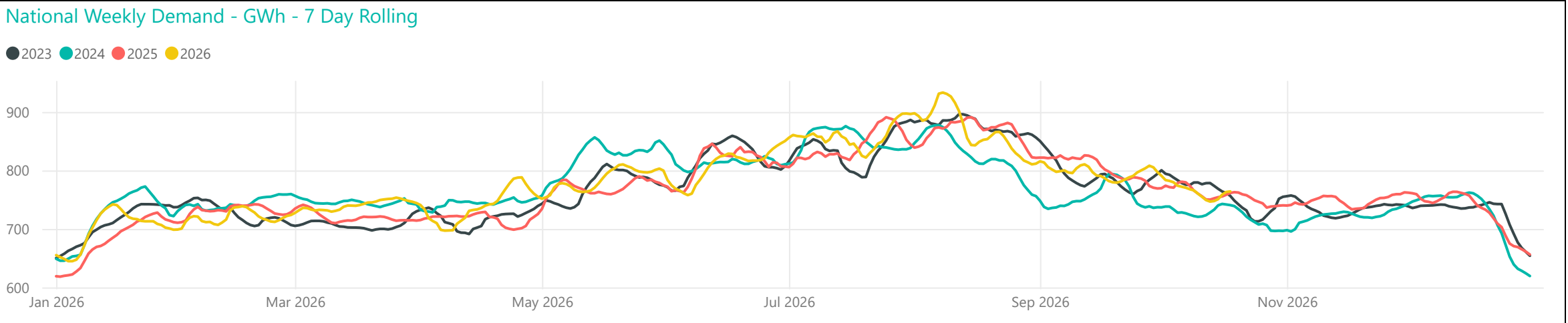
Generation Breakdown - Last Two Weeks

Measured in MW and displayed at trading period level for last 14 days

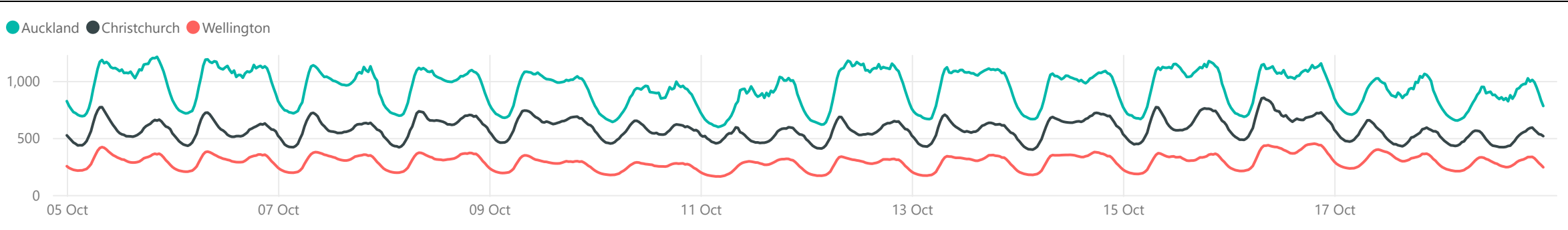




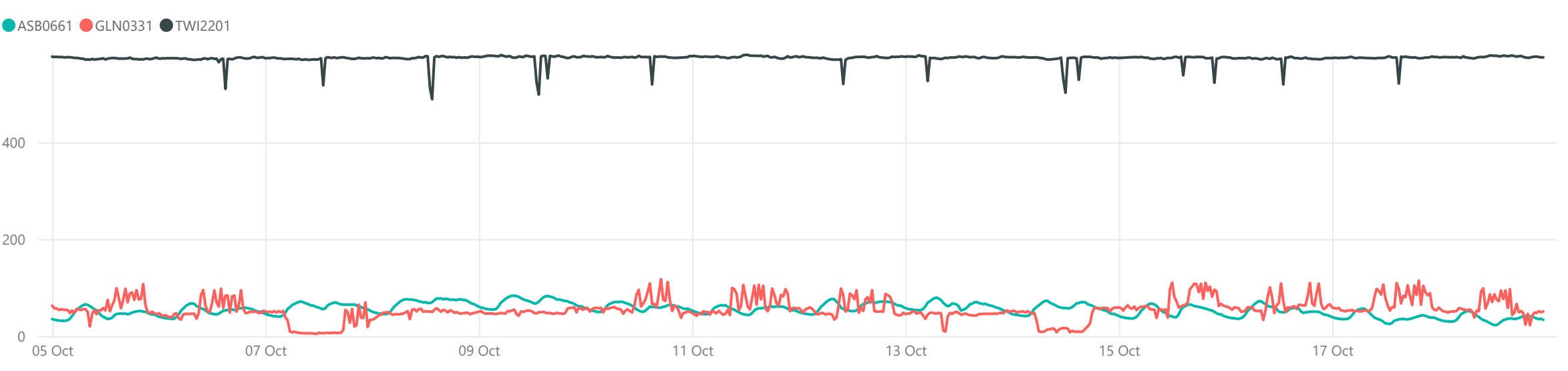
Weekly Profiles



Conforming Load Profiles - Last Two Weeks *Measured in MW shown by region*

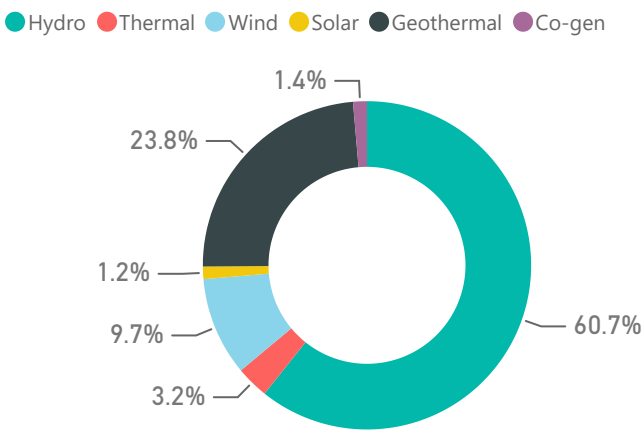


Non-Conforming Load Profiles - Last Two Weeks *Measured in MW shown by GXP*

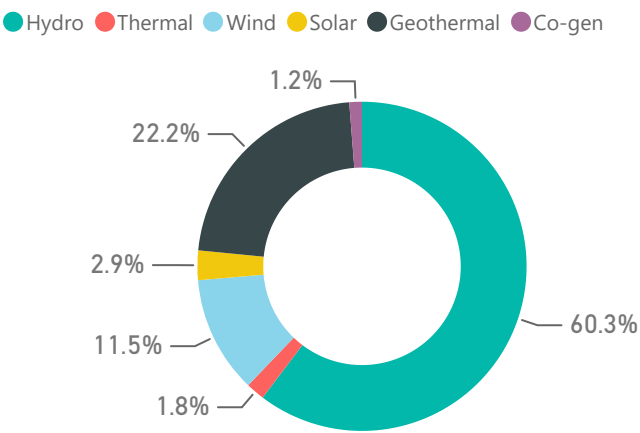


Generation Mix

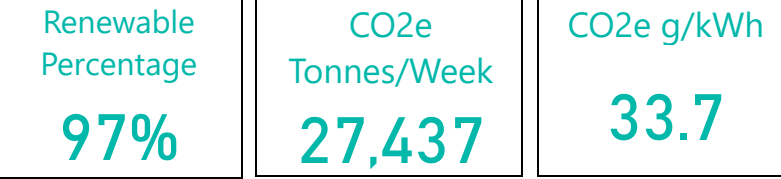
Last 52 Weeks Generation Mix - Weekly GWh



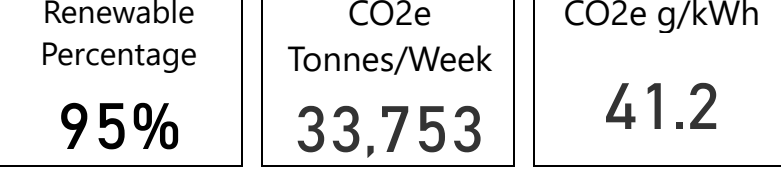
Last 7 Days Generation Mix - Weekly GWh



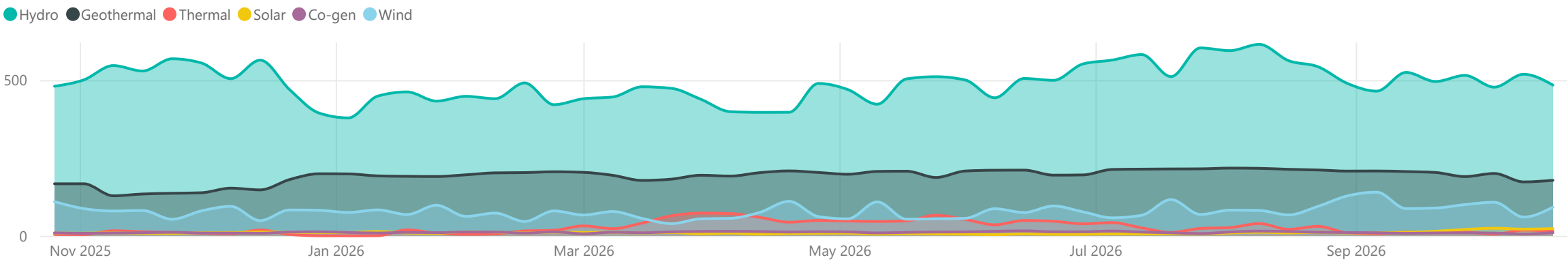
Average Metrics Last 7 Days



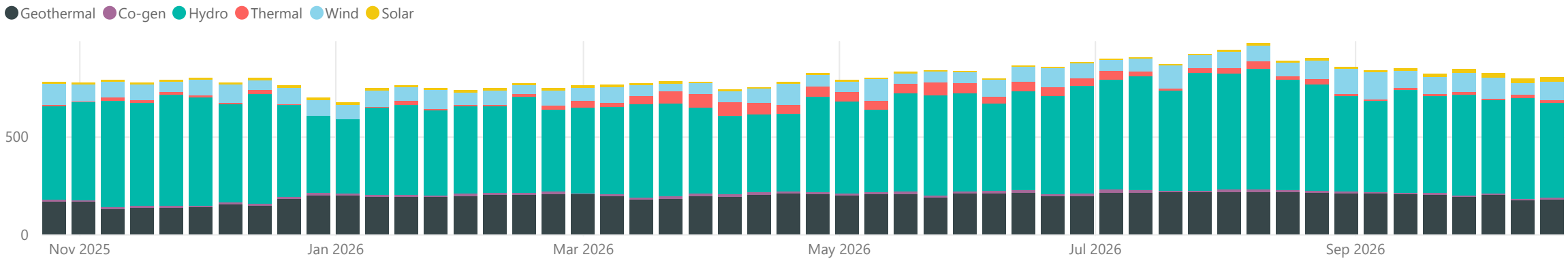
Average Metrics Last 52 Weeks



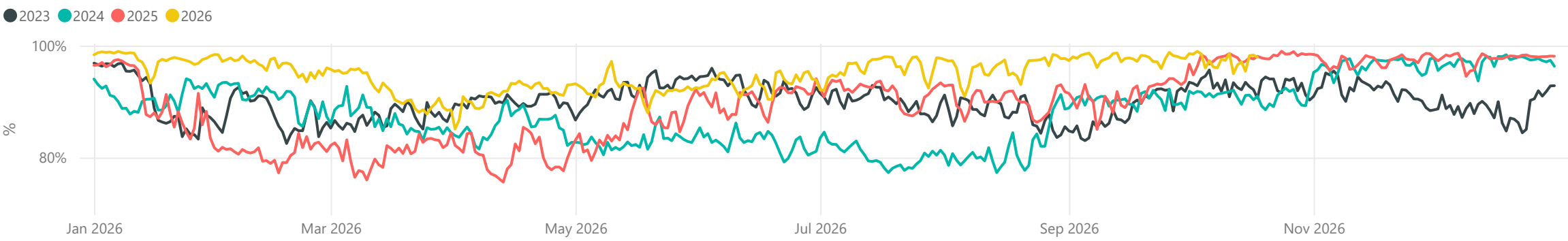
Weekly Generation Mix - GWh



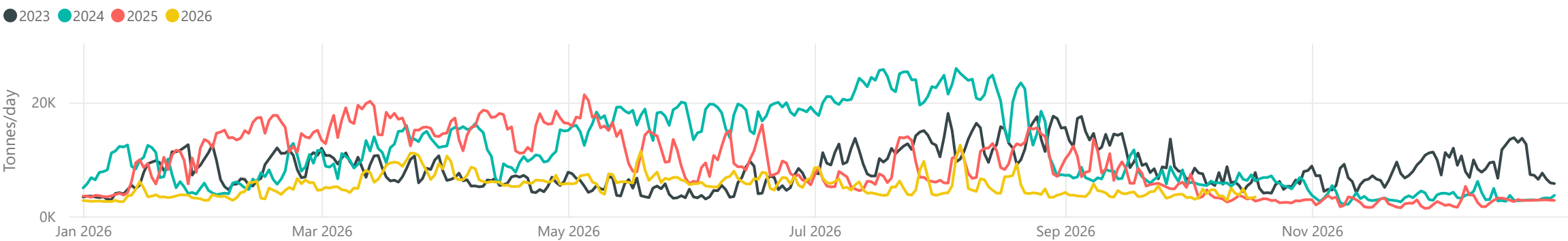
Weekly Generation Mix - GWh



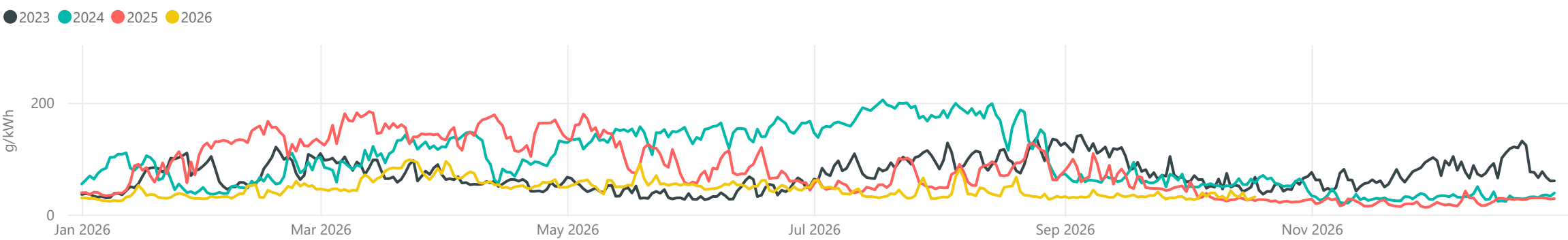
NZ Renewable Percentage

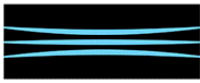


CO2 Tonnes/Day

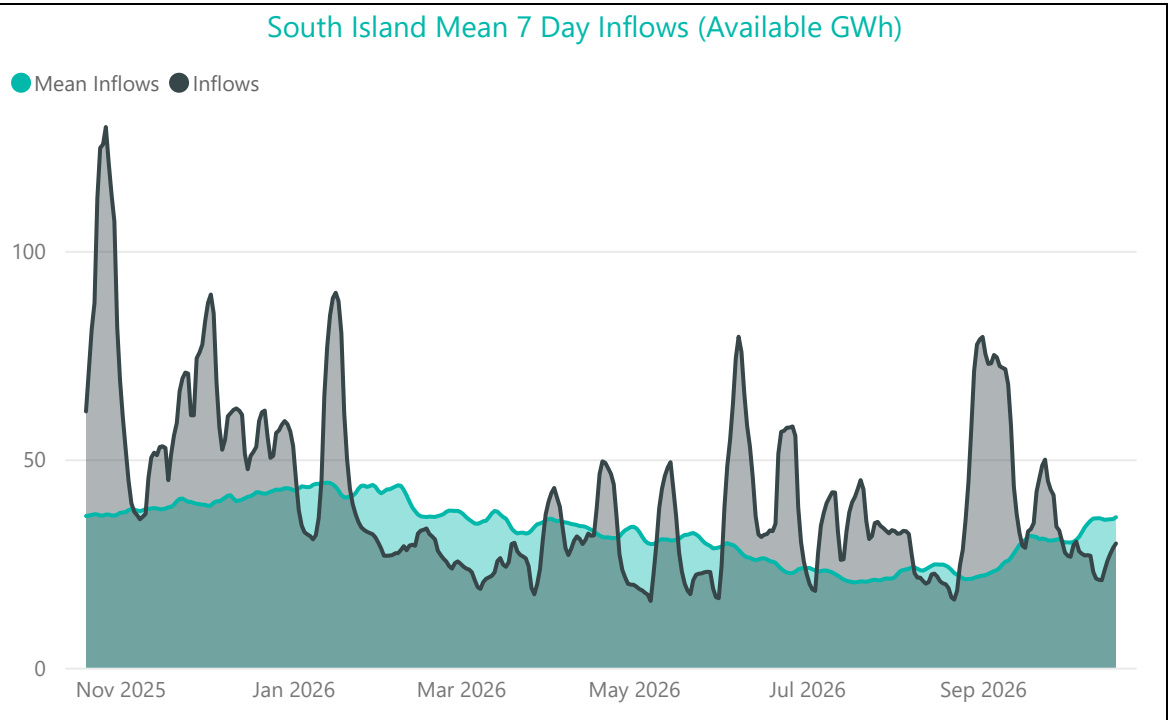
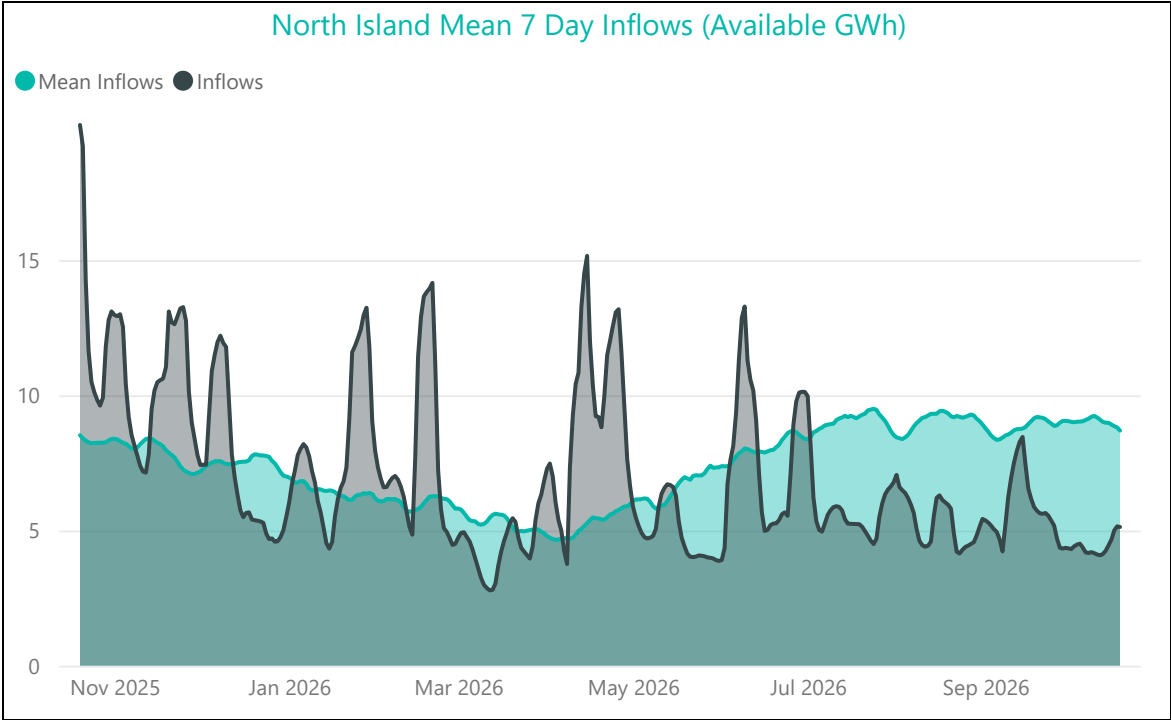
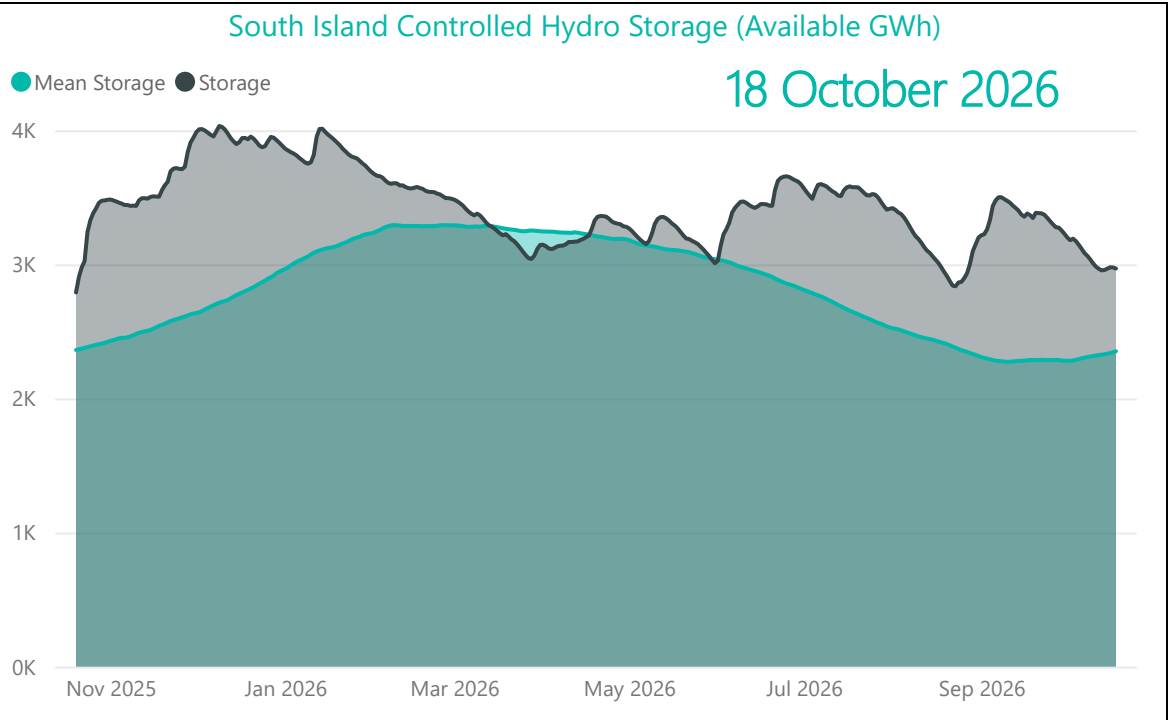
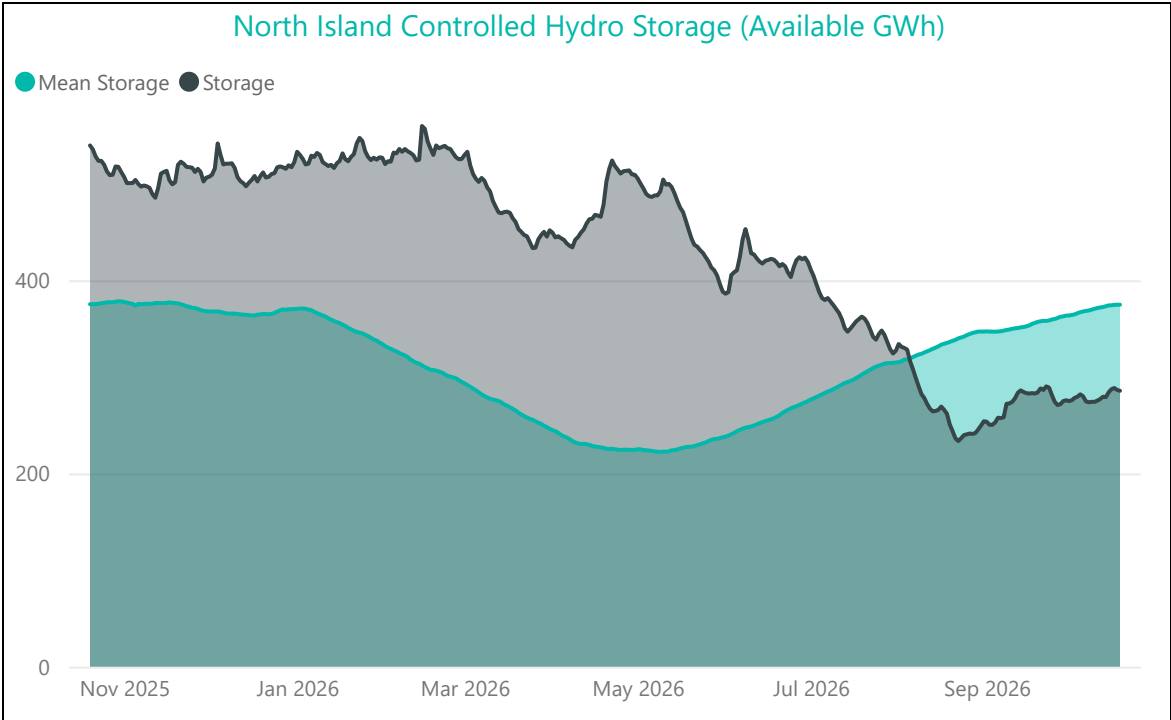
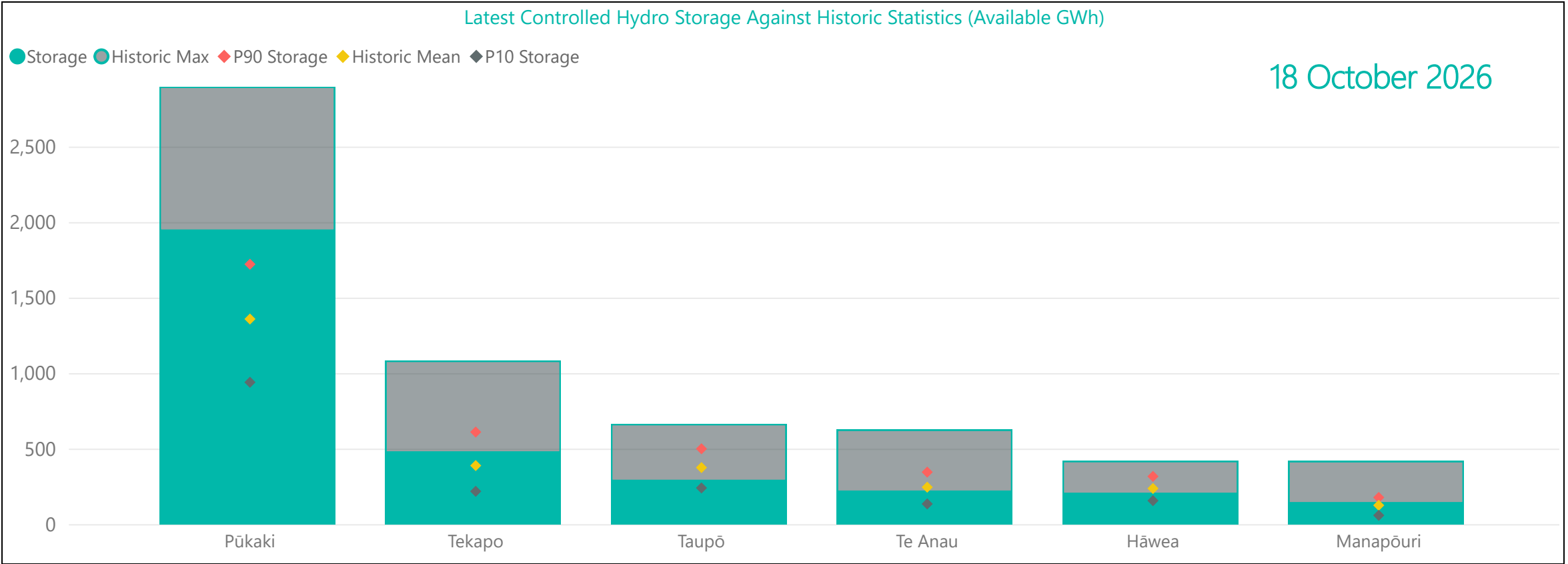


Average CO2 g/kWh





Hydro Storage



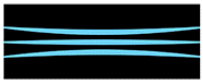
For further information on security of supply and Transpower's responsibilities as the System Operator, refer to our webpage here: <https://www.transpower.co.nz/system-operator/security-supply>.

For any inquiries related to security of supply contact market.operations@transpower.co.nz

Hydro data used in this report is sourced from [NZX Hydro](#).

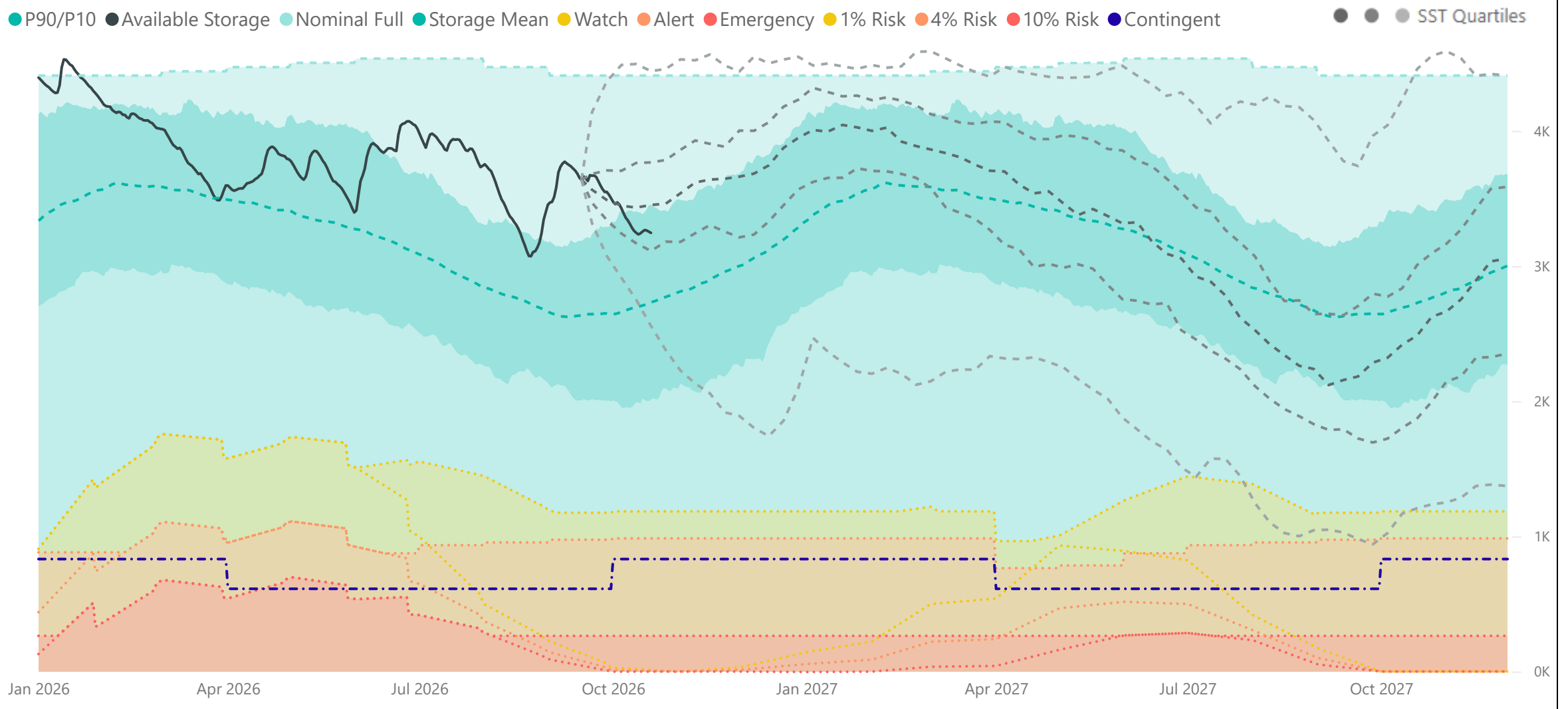
Electricity risk curves have been developed for the purposes of reflecting the risk of extended energy shortages in a straightforward way, using a standardised set of assumptions.

Further information on the methodology of modelling electricity risk curves may be found here: <https://www.transpower.co.nz/system-operator/security-supply/hydro-risk-curves-explanation>

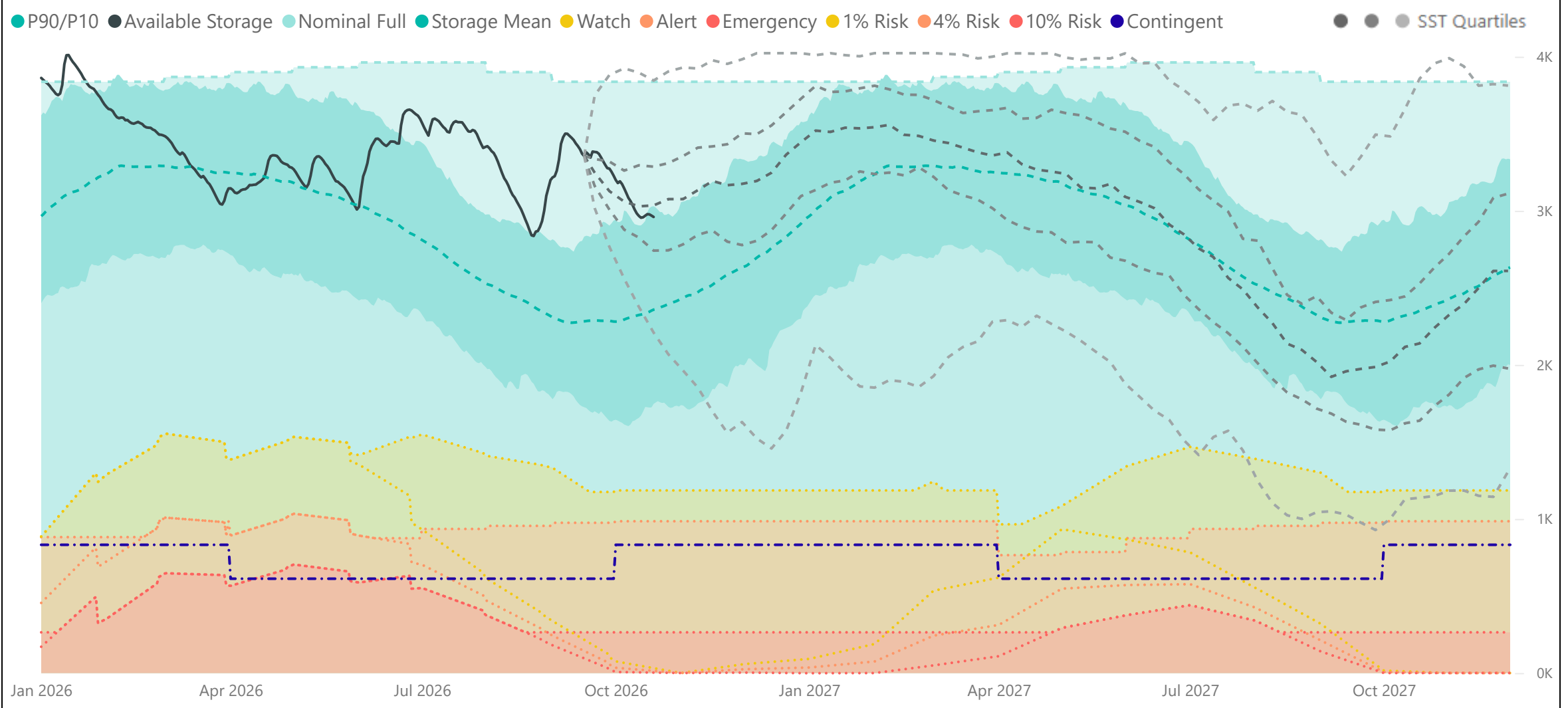


Electricity Risk Curves

New Zealand Electricity Risk Status Curves (Available GWh)



South Island Electricity Risk Status Curves (Available GWh)



Electricity Risk Curve Explanation:

Watch Curve - The maximum of the one percent risk curve or the Alert curve plus the greater of the Watch adder or the worst-case simulated storage drop

Alert Curve - The maximum of the four percent risk curve and the floor and buffer

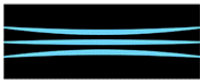
Emergency Curve - The maximum of the 10 percent risk curve and the floor and buffer

Official Conservation Campaign Start - The Emergency Curve

Official Conservation Campaign Stop - The maximum of the eight percent risk curve and the floor and buffer

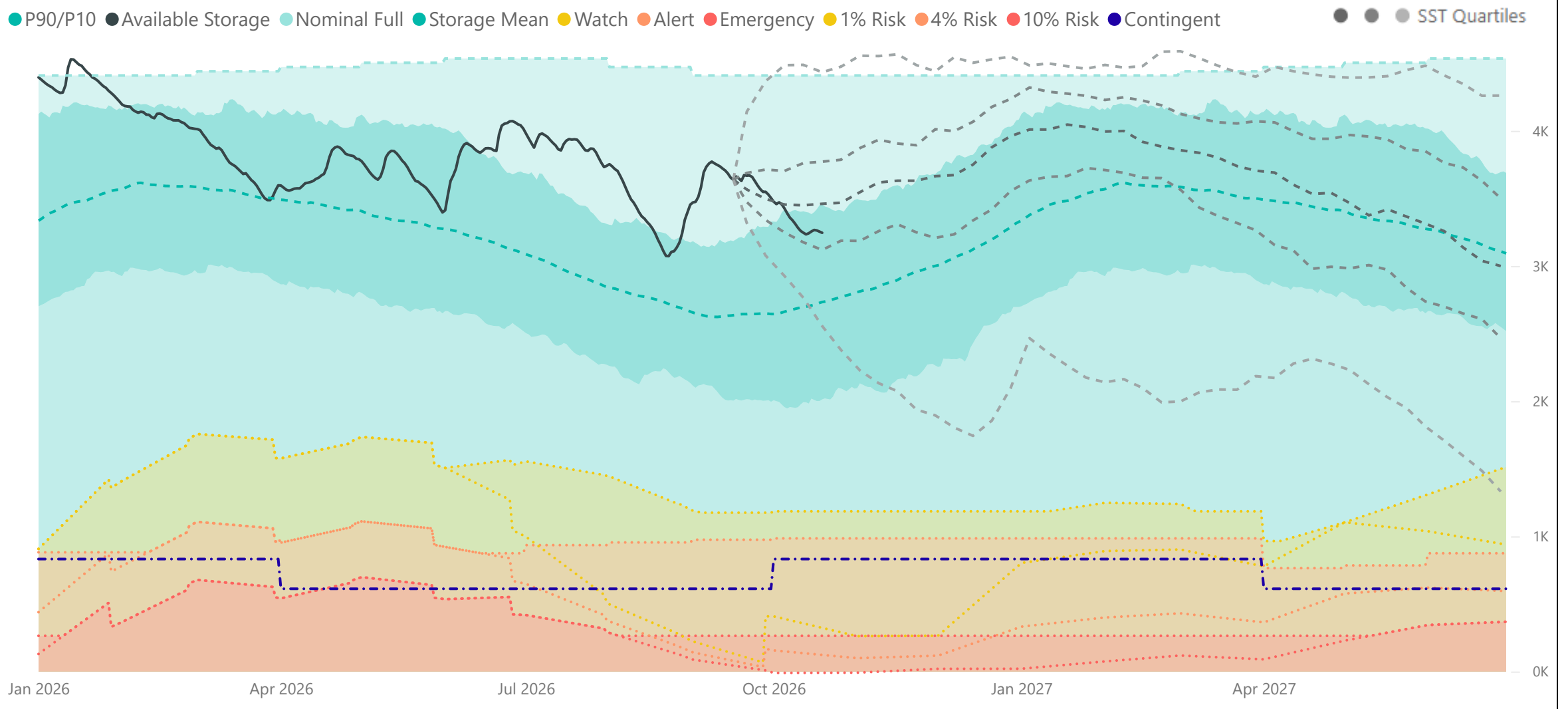
Note: The floor is equal to the amount of contingent hydro storage that is linked to the specific electricity risk curve, plus the amount of contingent hydro storage linked to electricity risk curves representing higher levels of risk of future shortage, if any, and the buffer as specified in the SOSFIP.

The dashed grey lines represent the minimum, lower quartile, median, upper quartile and the maximum range of the simulated storage trajectories (SSTs). These will be updated with each Electricity Risk Curve update (monthly).

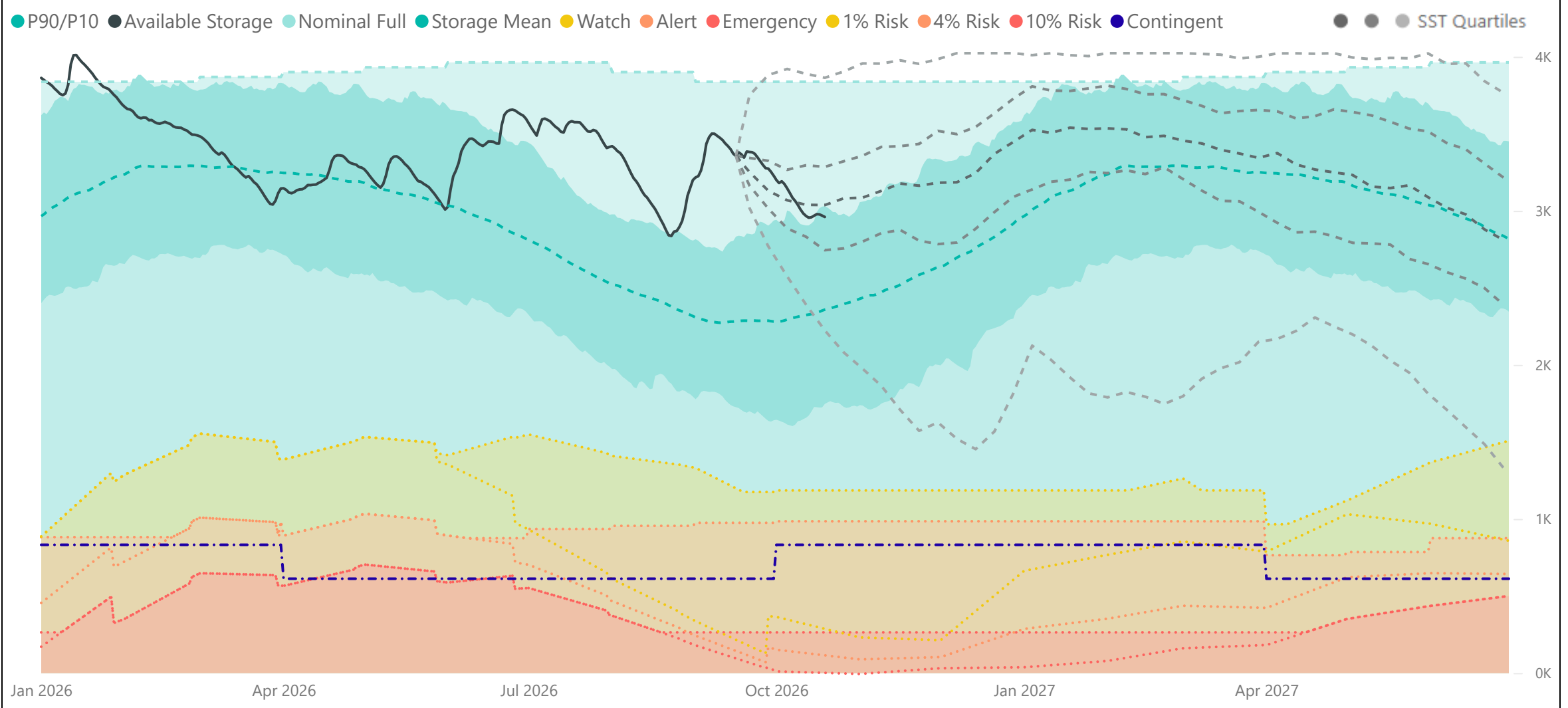


Electricity Risk Curves - Contracted Fuel Case

Contracted Fuel Case - New Zealand Electricity Risk Status Curves (Available GWh)



Contracted Fuel Case - South Island Electricity Risk Status Curves (Available GWh)



Electricity Risk Curve Explanation:

Watch Curve - The maximum of the one percent risk curve or the Alert curve plus the greater of the Watch adder or the worst-case simulated storage drop

Alert Curve - The maximum of the four percent risk curve and the floor and buffer

Emergency Curve - The maximum of the 10 percent risk curve and the floor and buffer

Note: The floor is equal to the amount of contingent hydro storage that is linked to the specific electricity risk curve, plus the amount of contingent hydro storage linked to electricity risk curves representing higher levels of risk of future shortage, if any, and the buffer as specified in the SOSFIP.

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