Market Operations Weekly Report - Week Ended 13 September 2026

Overview

Hydro inflows remained strong this week with storage continuing to sit well above the average for this time of year at 141%.

In this week's insight we cover record high wind generation as new wind assets started generating and we entered the windy spring season.

Security of Supply

Energy

National hydro storage remained steady at 141% of the historic mean. South Island storage decreased slightly from 152% to 150% and North Island storage increased from 74% to 81%.

Capacity

Residuals last week were healthy. The lowest residual of 454 MW occurred on Wednesday 09 September during the morning peak and coinciding with a period of low wind generation.

The N-1-G margins in the NZGB forecast continue to increase with healthy levels through to the end of October. 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 slightly last week to 806 GWh compared to 799 GWh the week prior. The highest demand peak occurred at 6:30 pm on Monday 07 August at 6,305 MW.

Weekly Prices

The average wholesale electricity spot price increased at Ōtāhuhu last week from $22/MWh in the previous week to $39/MWh last week. Prices peaked at $230/MWh at 6:30 pm on Sunday 13 September with price separation between the North and South Islands, coinciding with low North island wind generation.

There were also some periods of price separation between the North and South Islands during the week.

Generation Mix

Hydro generation last week increased slightly to 62% of the generation mix from 55% the week prior, above its yearly average of 60%. Wind generation decreased from 16% to 10% last week. Geothermal generation sat around its annual average of 24%. Thermal and solar generation contributed similarly to the generation mix at just above 1%.

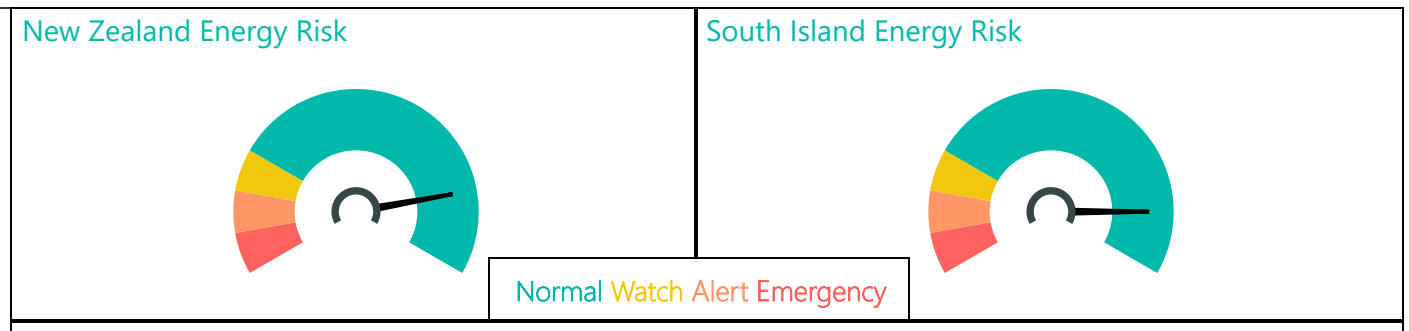
HVDC

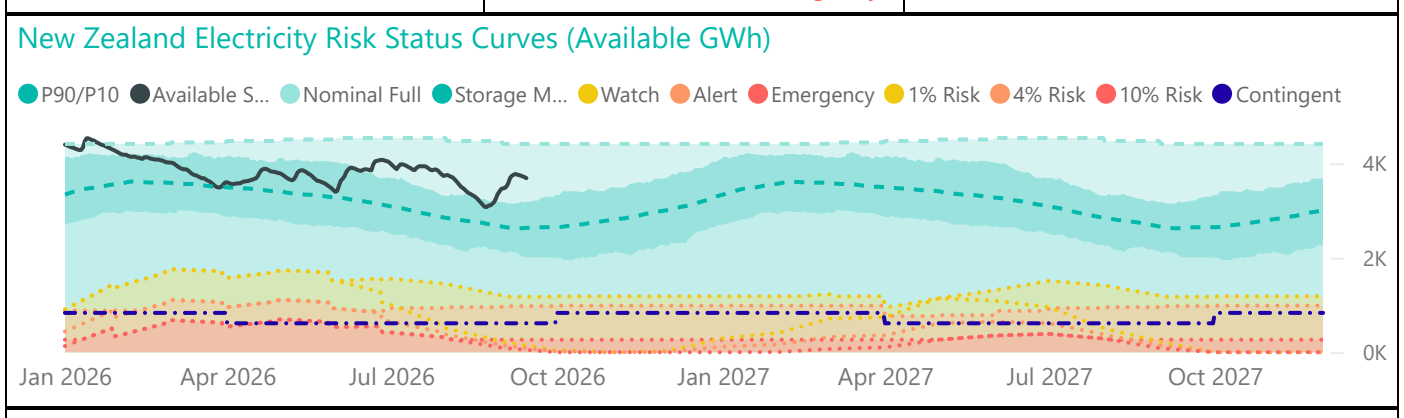
HVDC flows last week was predominantly northward. In total 116 GWh was transferred north with brief periods of southward transfer early Saturday 7 September and Sunday 13 September. High northward transfer overnight on Wednesday 9 September coincided with low thermal and wind generation.

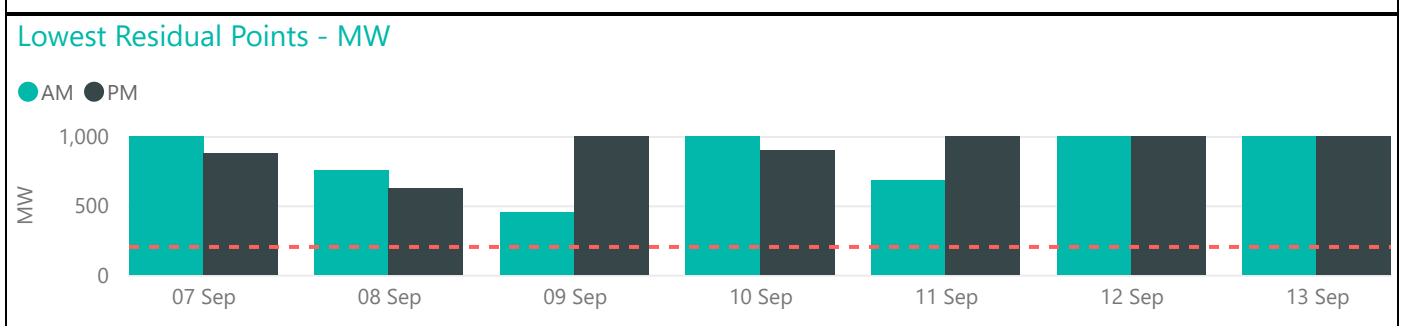
Consultations and Engagement

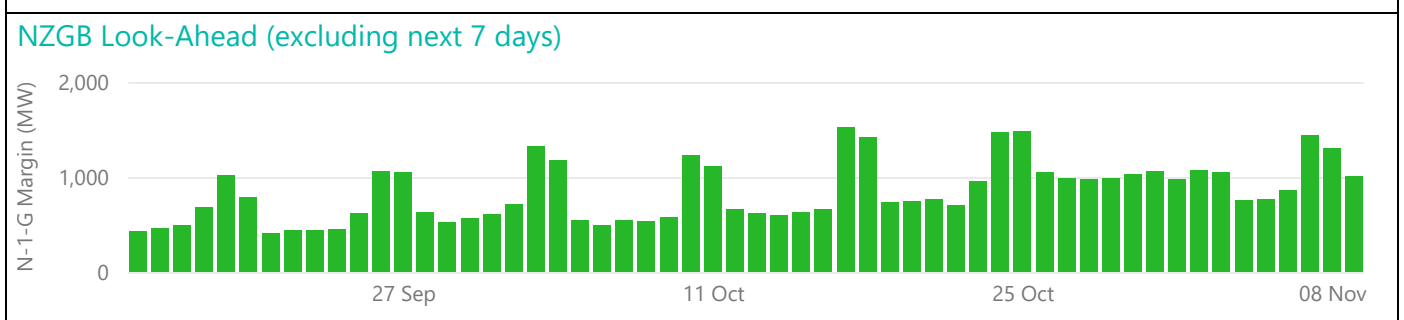
Ancillary Services Procurement Plan

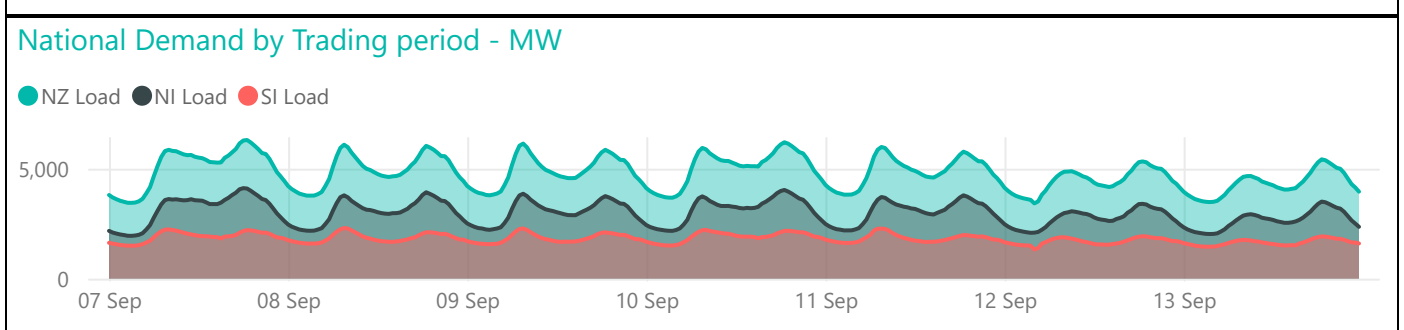
We are proposing updates to the Ancillary Services Procurement Plan (ASPP) to implement the new Emergency Reserve ancillary service. We're inviting feedback on this plan through to 25 September. You can read more here.

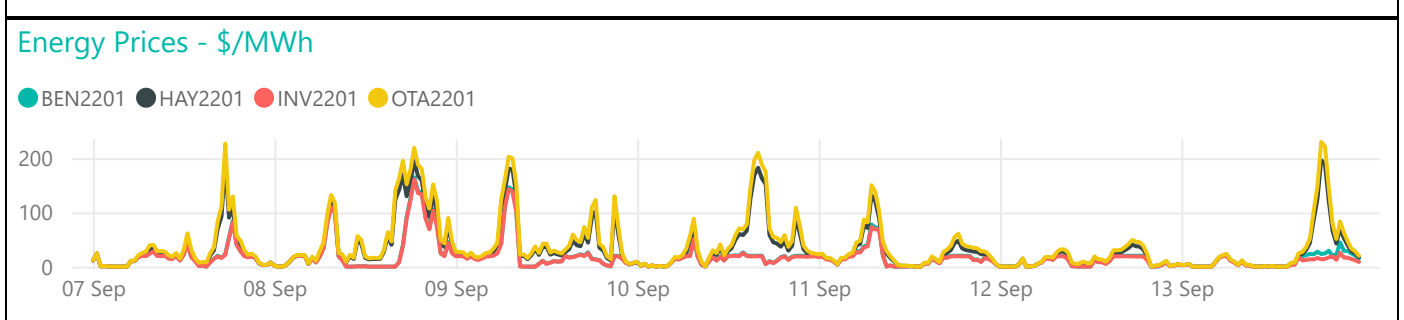


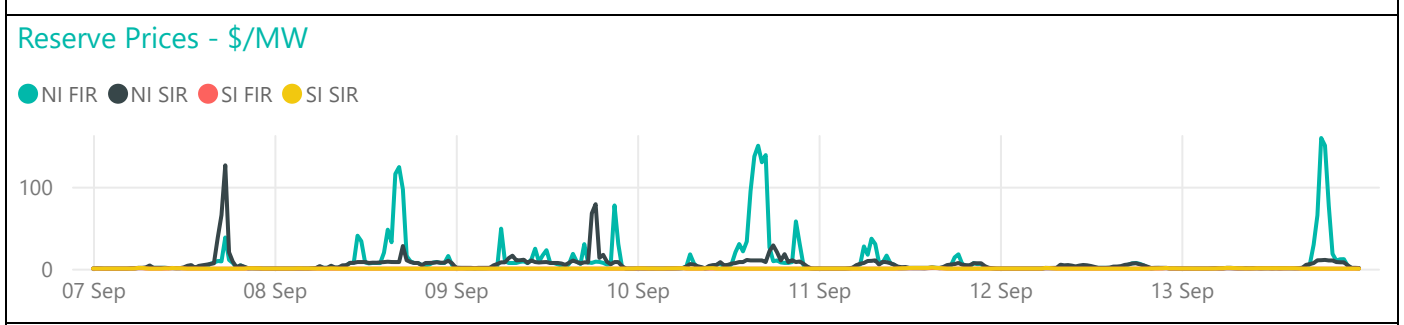


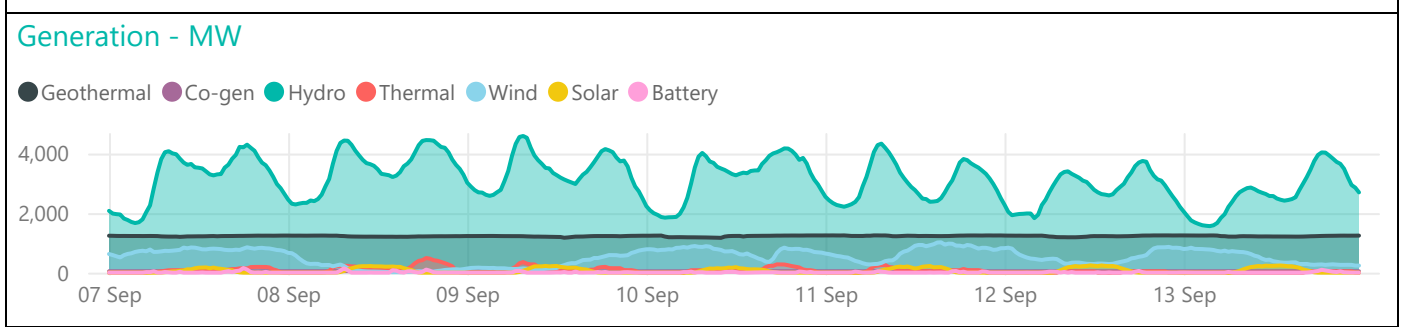


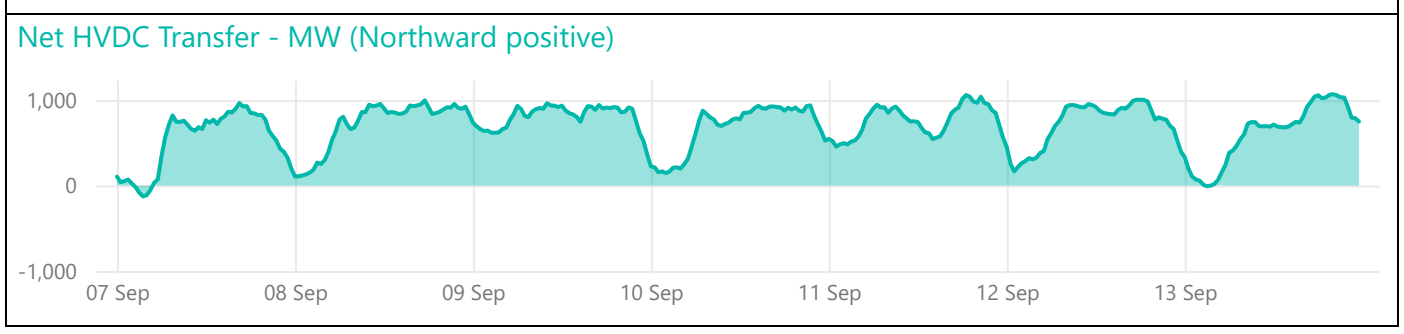












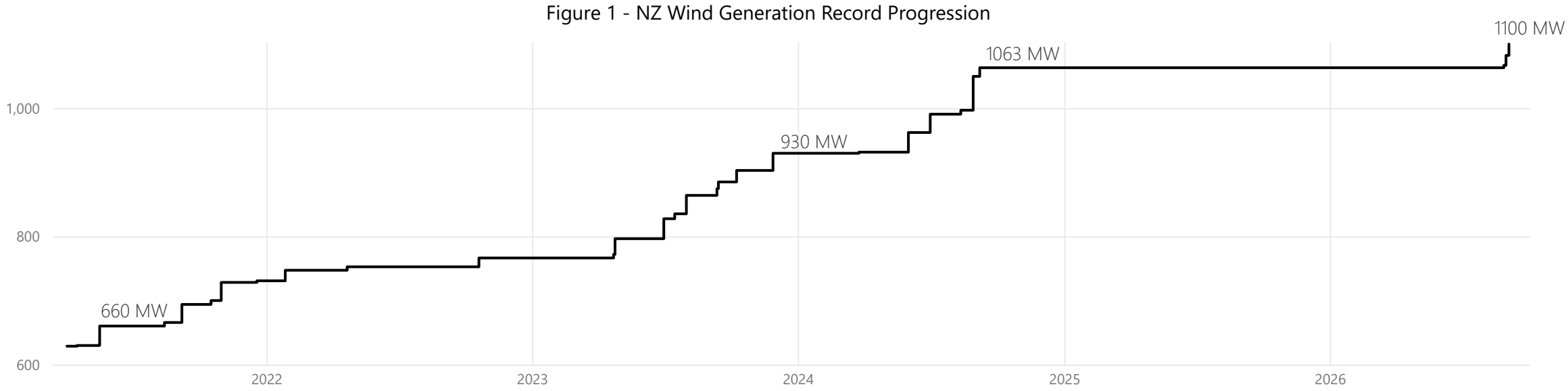
Weekly Insight - Record high wind generation on 4 September

Windy spring weather and the start of commissioning for the Kaiwera Downs II and Kaiwaikawe windfarms led to wind generation hitting a new record of 1100 MW on 4 September 2026.

As the commissioning of these new wind assets has progressed, wind records have been broken five times this year. The previous record of 1063 MW was set during September 2024, the month after the Harapaki wind farm reached full output.

Figure 1 shows the progression of all-time wind generation records, with each step representing a trading period in which wind generation exceeded the previous record. Many of these records have been achieved during the windy spring season.

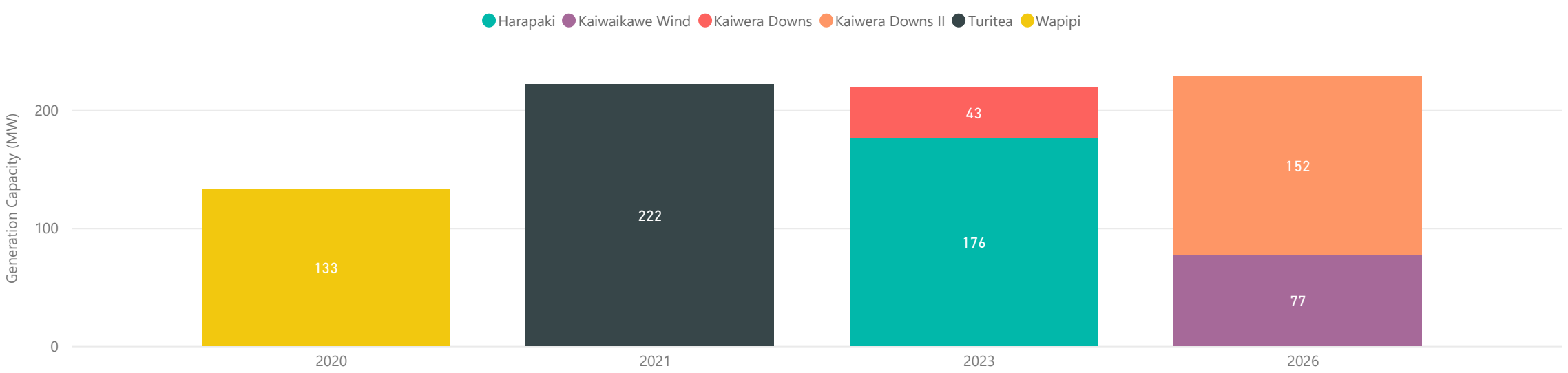
Figure 1 - NZ Wind Generation Record Progression



Significant increases to the wind generation records can be seen in 2021, 2023, 2024, and the recent new record. This can largely be attributed to when new wind farms connect to the grid, increasing wind generation capacity and thus possible total wind generation.

Figure 2 shows the capacity of new wind farms connected to the grid since 2020. Full output from the 77 MW Kaiwaikawe wind farm is expected by the end of 2026, which should lead to further increases in the wind generation record.

Figure 2 - New Wind Generation Capacity

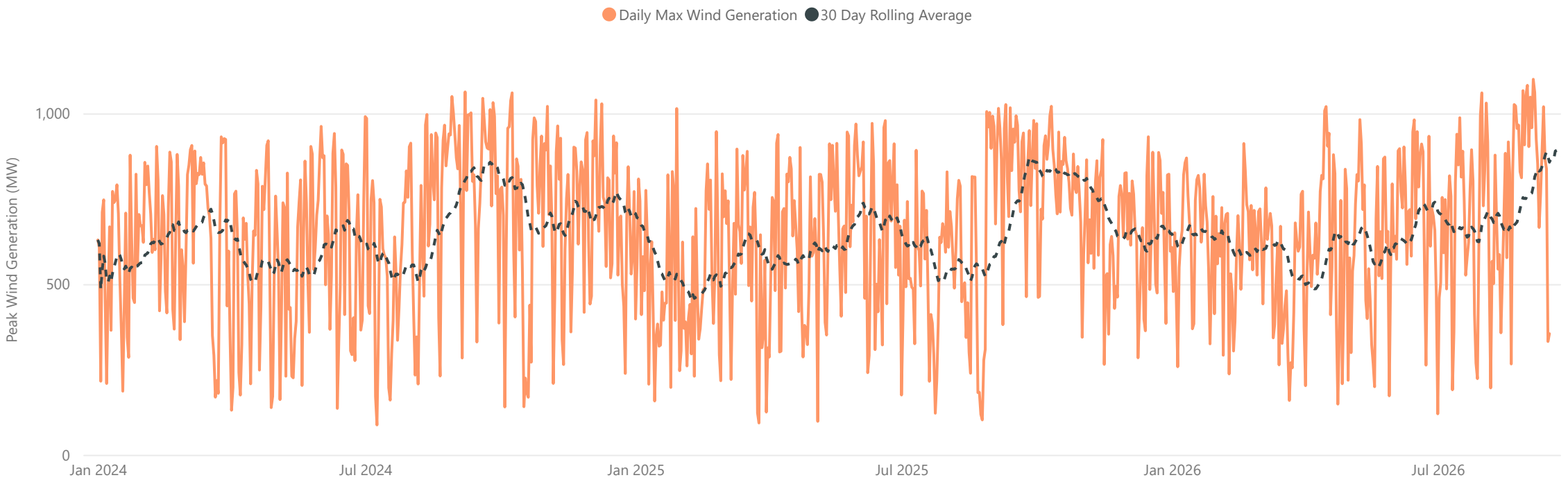


Seasonal trends

As a form of intermittent generation that is reliant on weather, the day-to-day variability of wind generation fluctuates. However, the 30-day rolling average removes some of this variability and allows us to see the overall and seasonal trends in wind generation capability. Figure 3 below shows the highest wind generation achieved each day and the 30-day rolling average since the beginning of 2024.

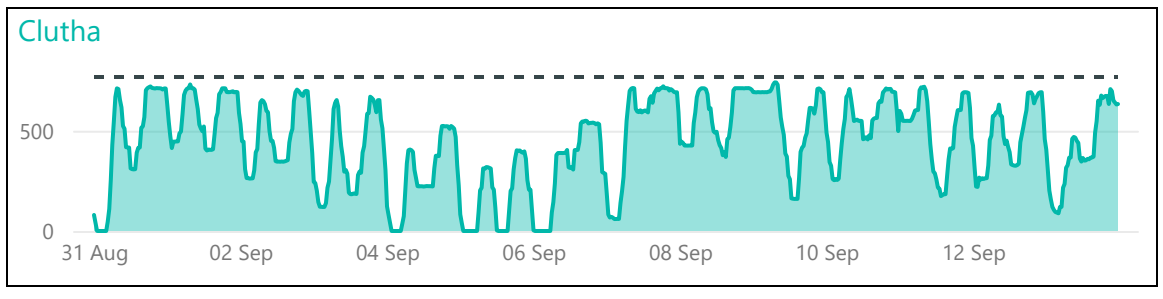
Wind generation tends to peak during the windier spring season as seen by the 30-day rolling average during 2024 and 2025. We may only be a few weeks into spring, but this seasonal increase in generation can already be seen – both in the rolling average and the new records.

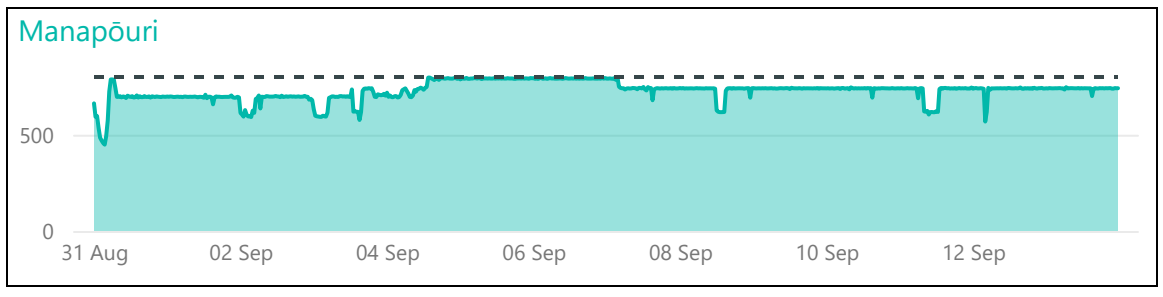
Figure 3 - Daily Peak Wind Generation and 30-Day Rolling Average

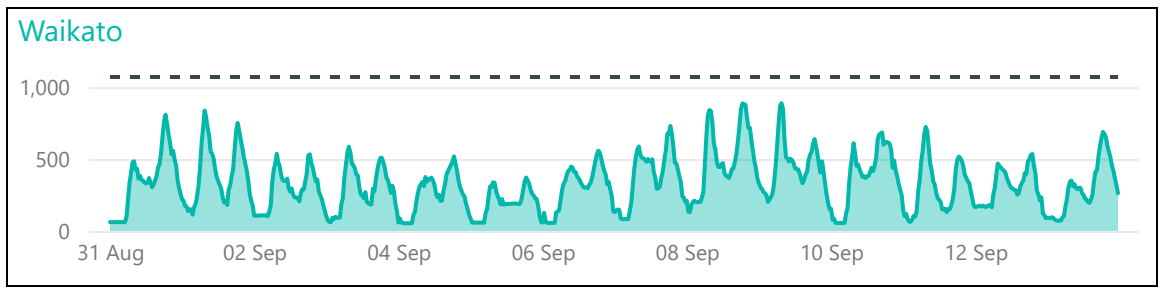


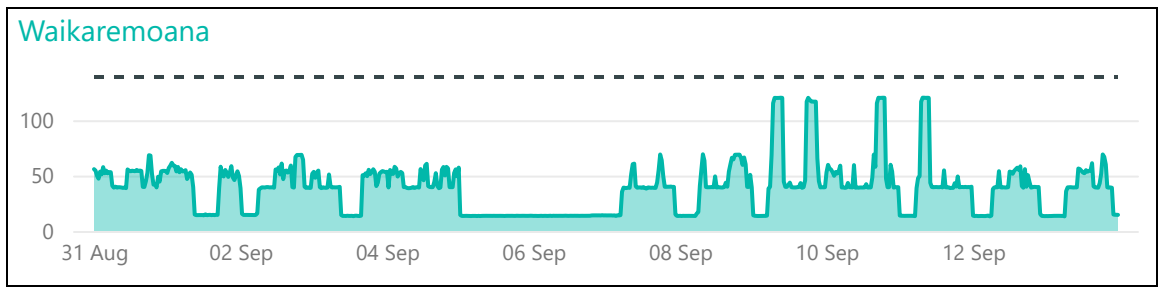
Generation Breakdown - Last Two Weeks

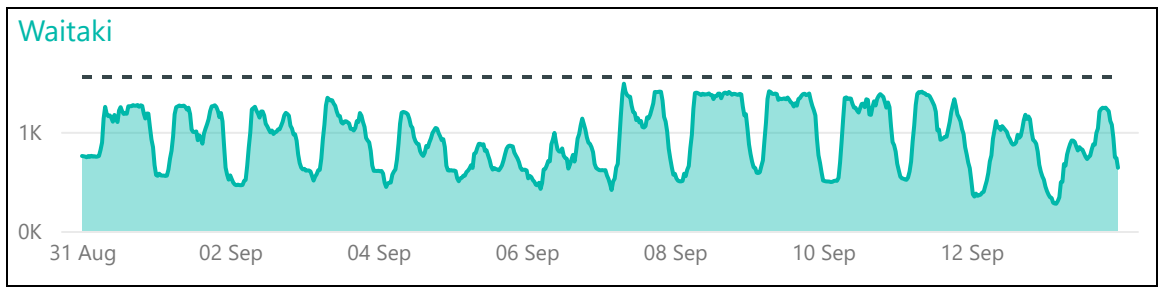
Measured in MW and displayed at trading period level for last 14 days

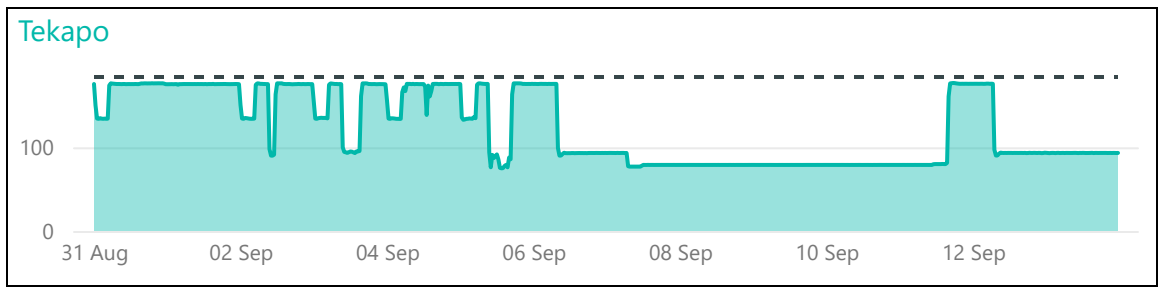


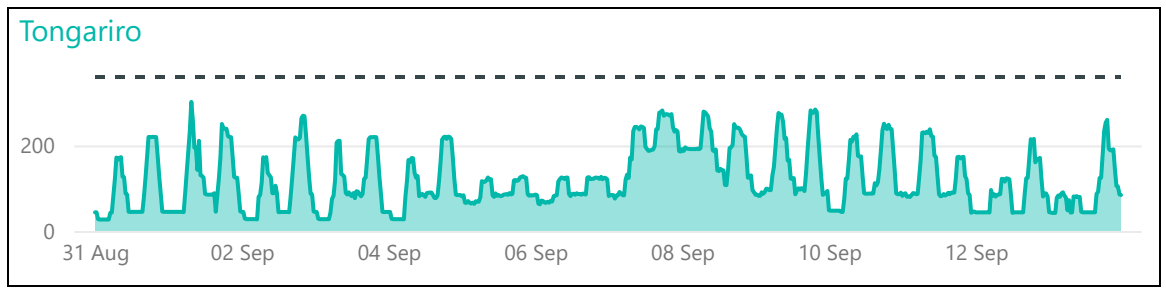


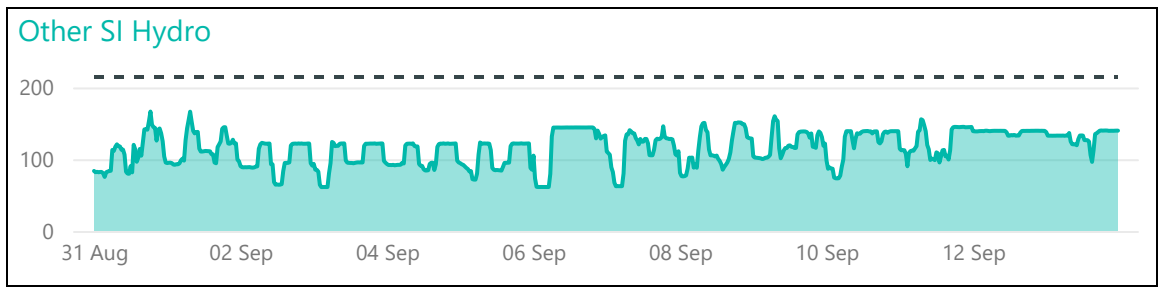


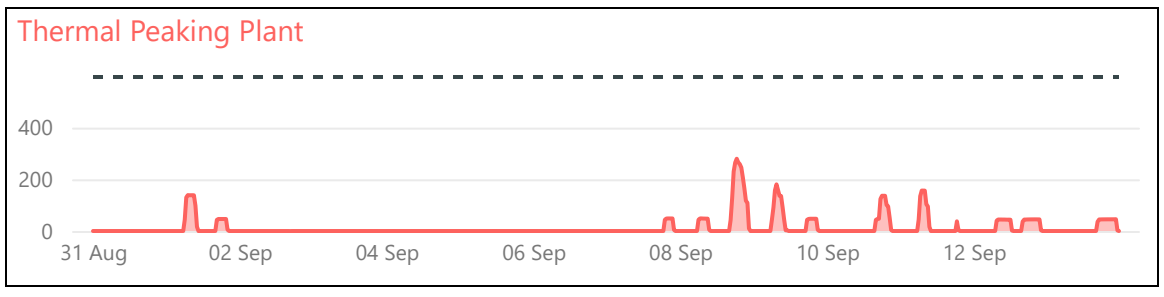


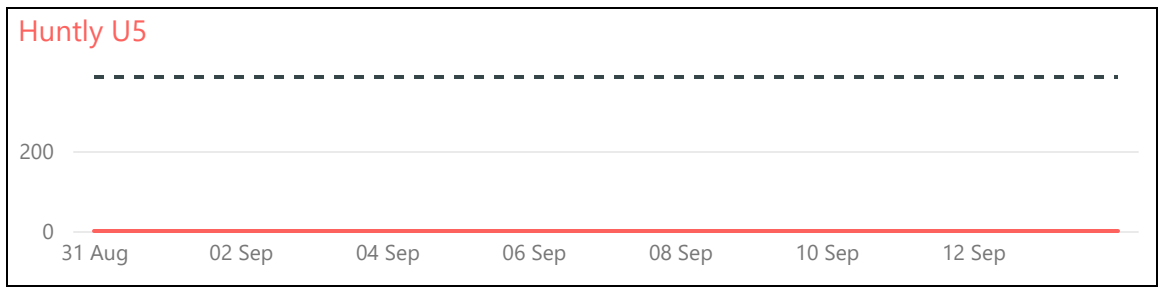


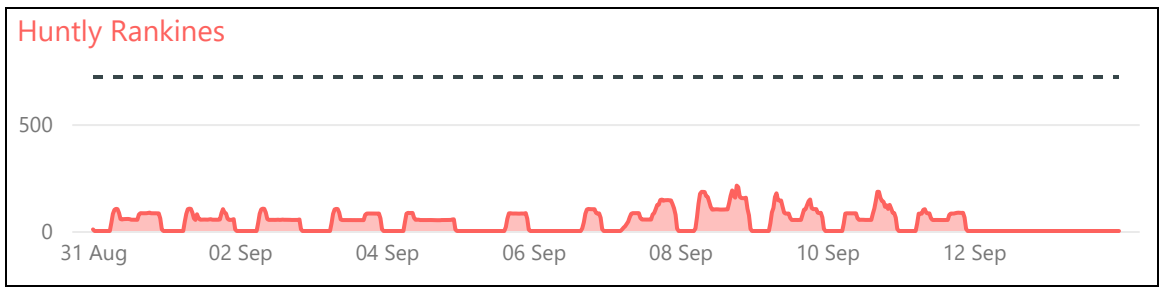


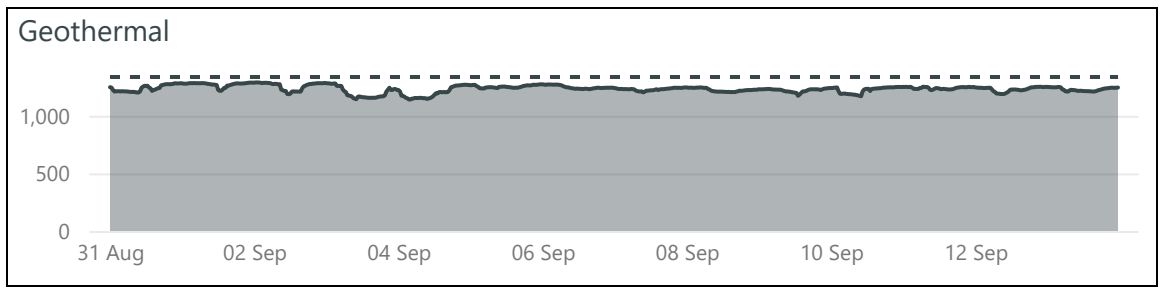


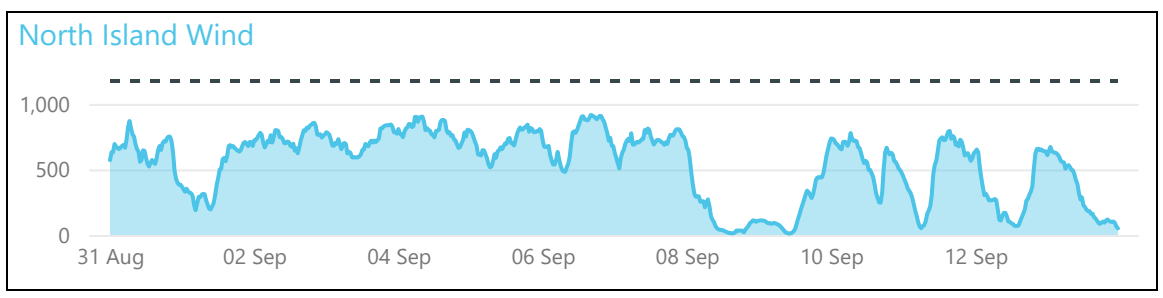


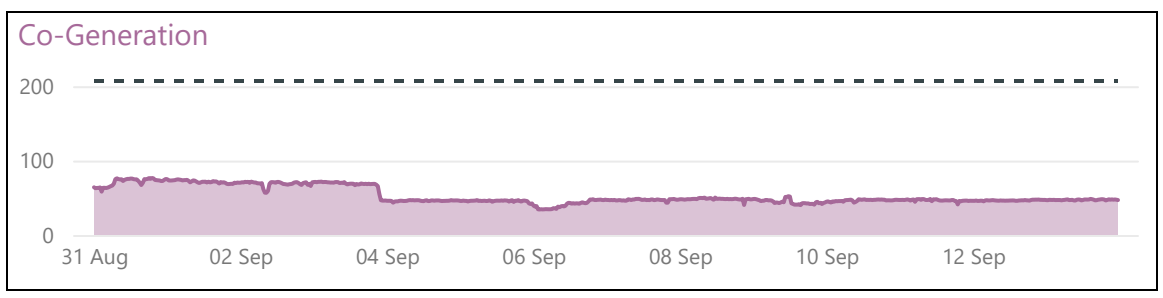


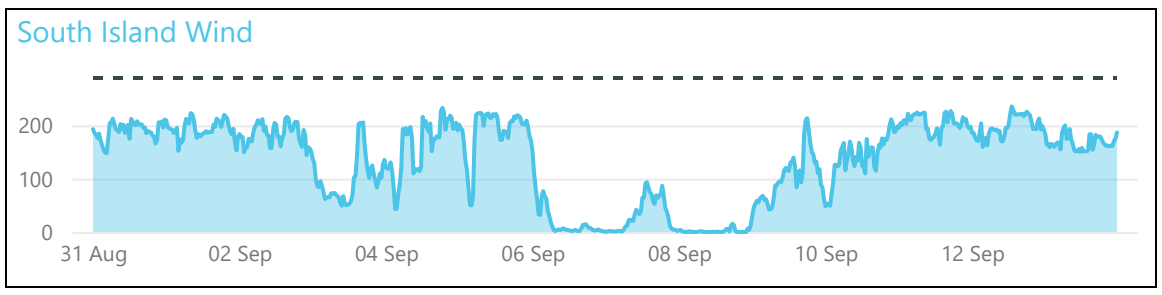


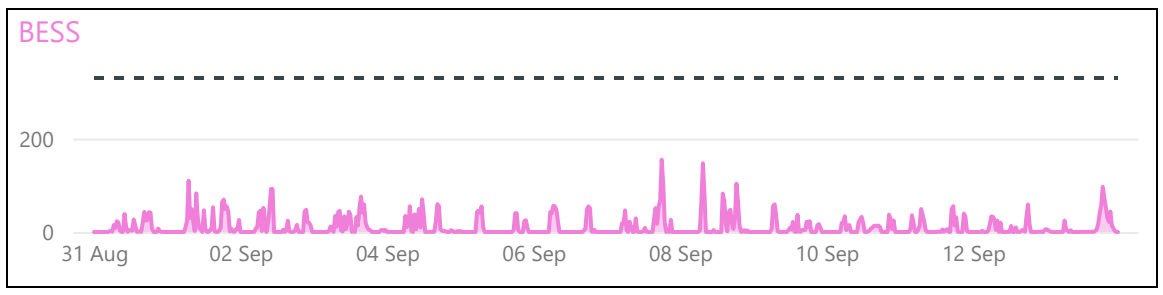


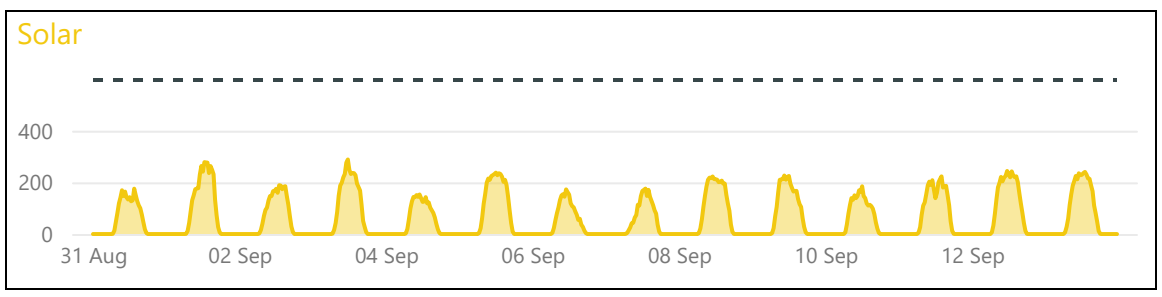






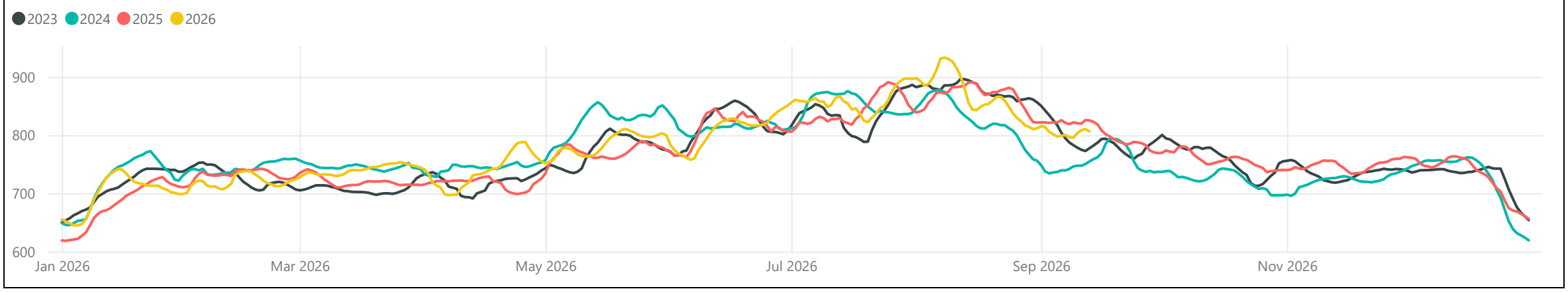




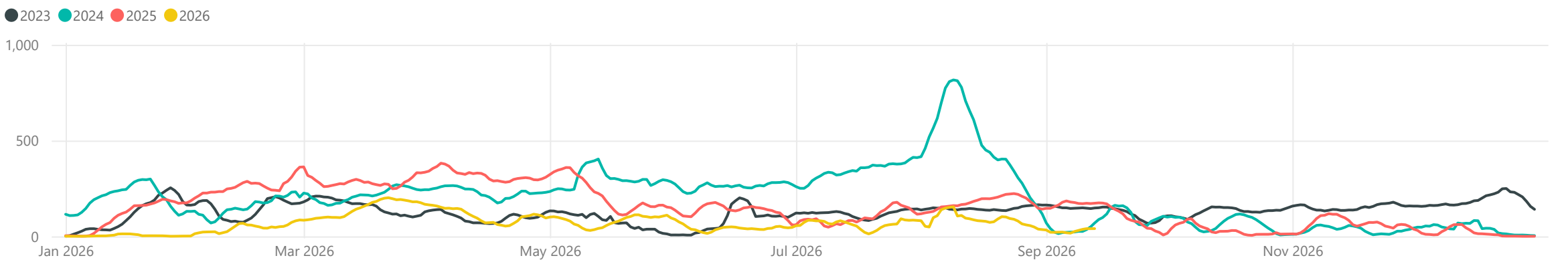


Weekly Profiles

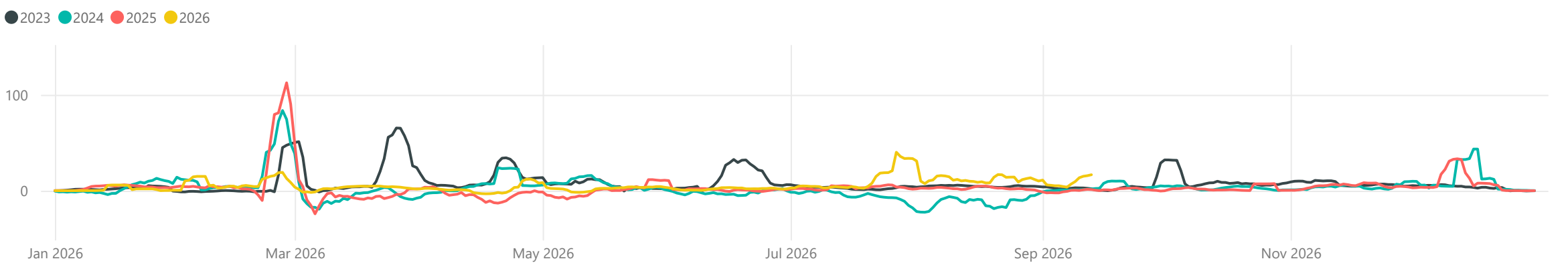
National Weekly Demand - GWh - 7 Day Rolling



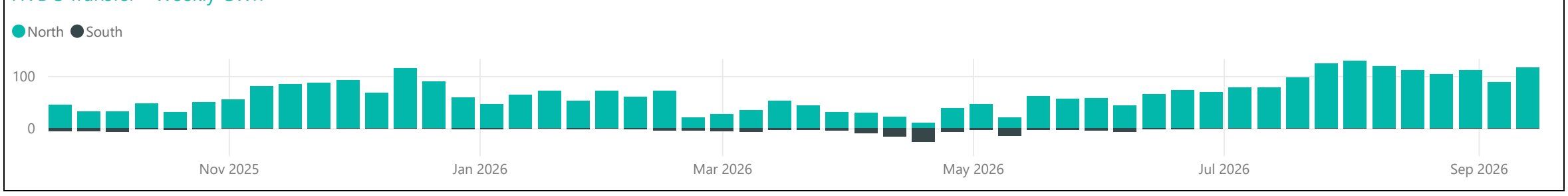
OTA2201 Weekly Rolling Average Spot Price - $/MWh



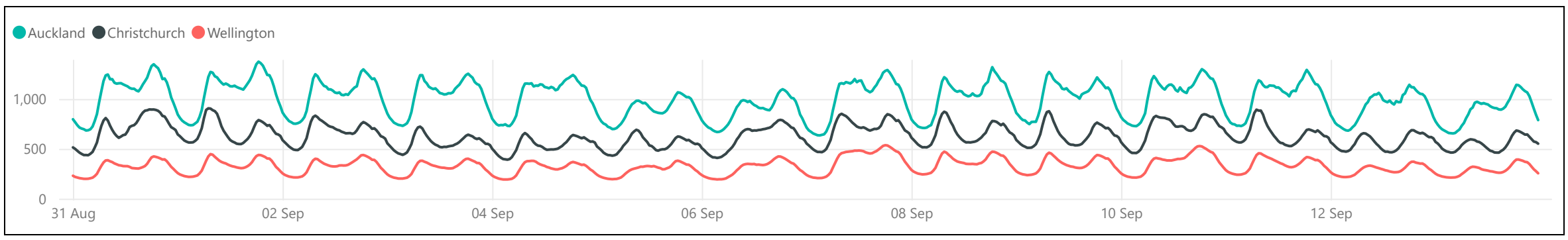
Weekly Rolling Price Separation (HAY2201 - BEN2201) - $/MWh



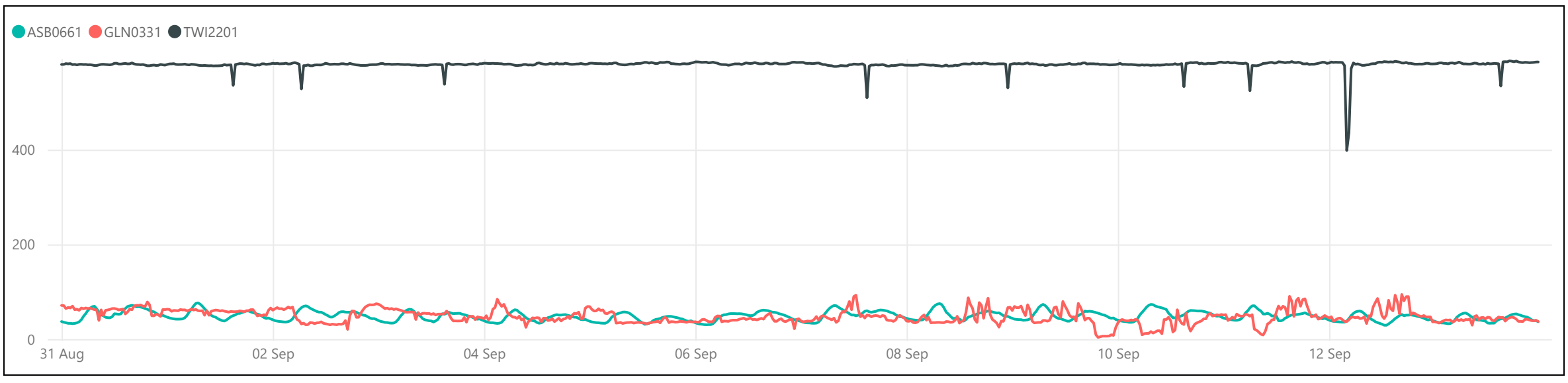
HVDC Transfer - Weekly GWh



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



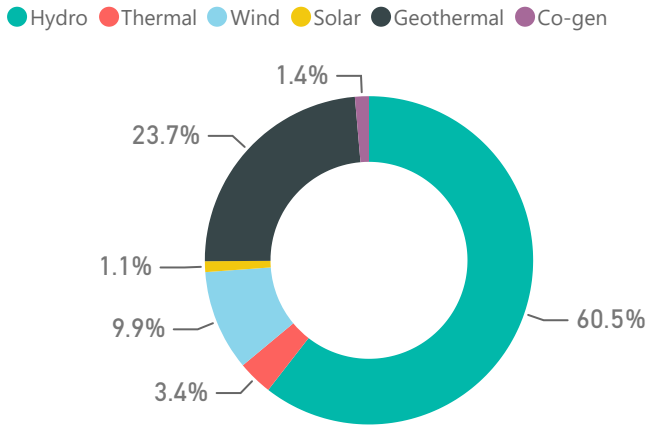
Non-Conforming Load Profiles - Last Two Weeks *Measured in MW shown by GXP*



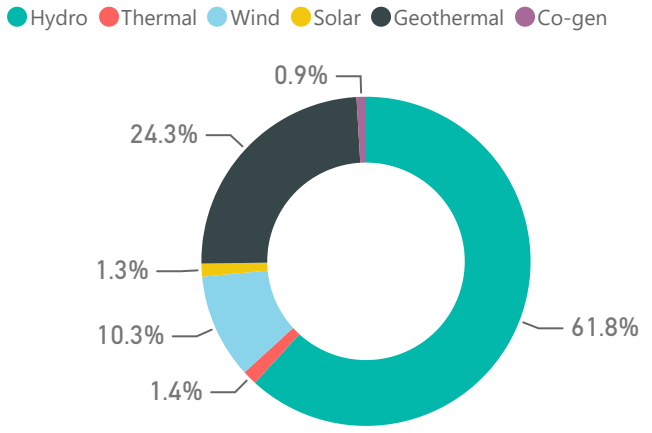
TRANSPOWER

Generation Mix

Last 52 Weeks Generation Mix - Weekly GWh



Last 7 Days Generation Mix - Weekly GWh



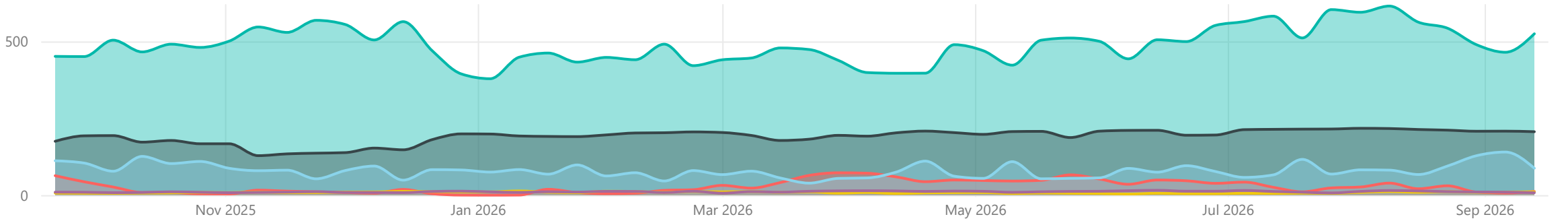
Average Metrics Last 7 Days

Renewable Percentage	CO2e Tonnes/Week	CO2e g/kWh
98%	29,686	34.4

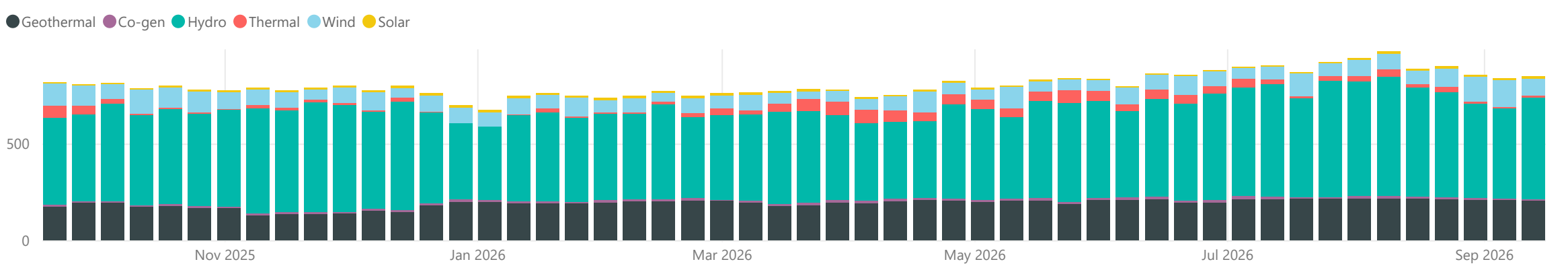
Average Metrics Last 52 Weeks

Renewable Percentage	CO2e Tonnes/Week	CO2e g/kWh
95%	34,393	42.0

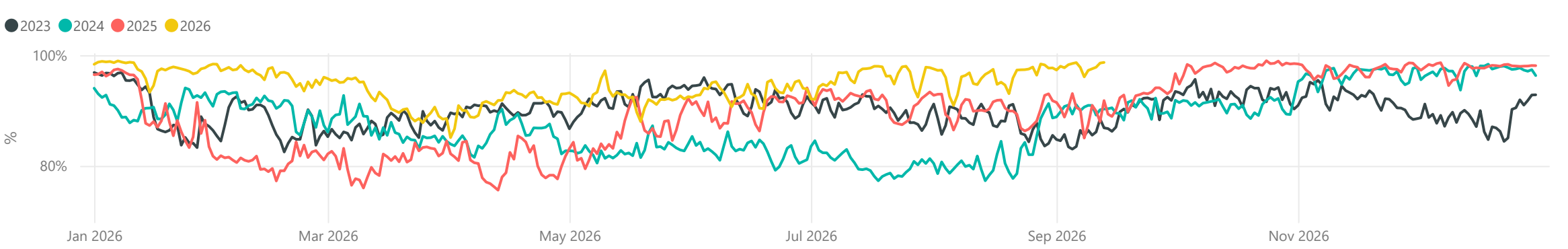
Weekly Generation Mix - GWh



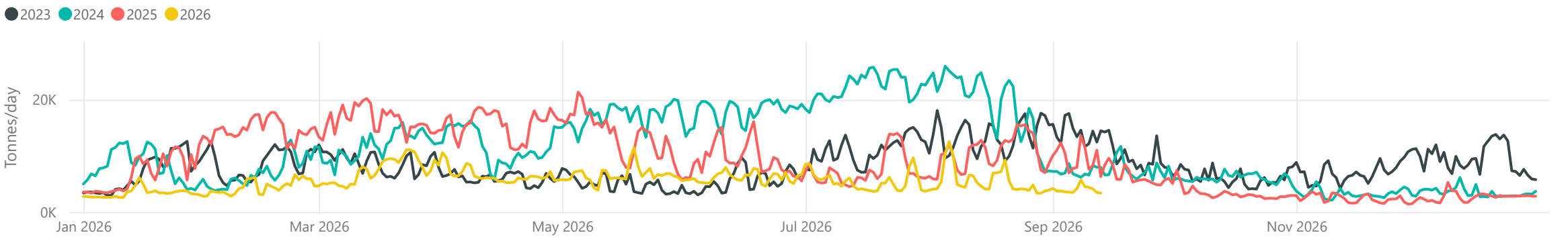
Weekly Generation Mix - GWh



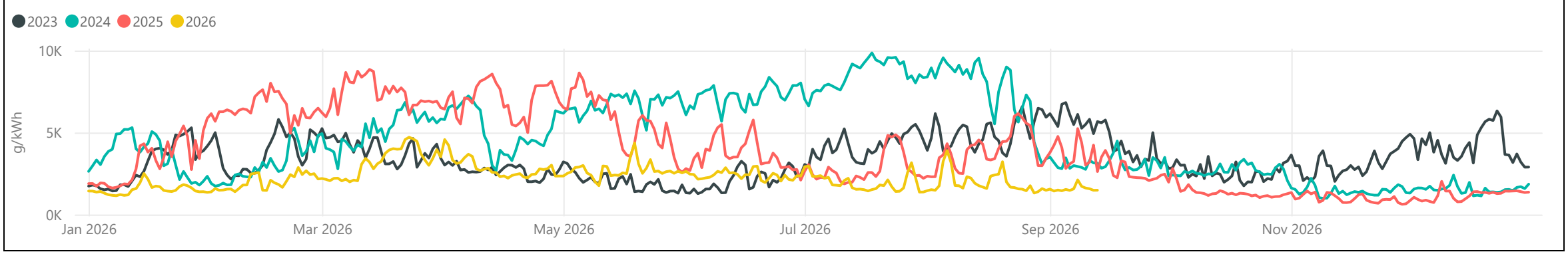
NZ Renewable Percentage



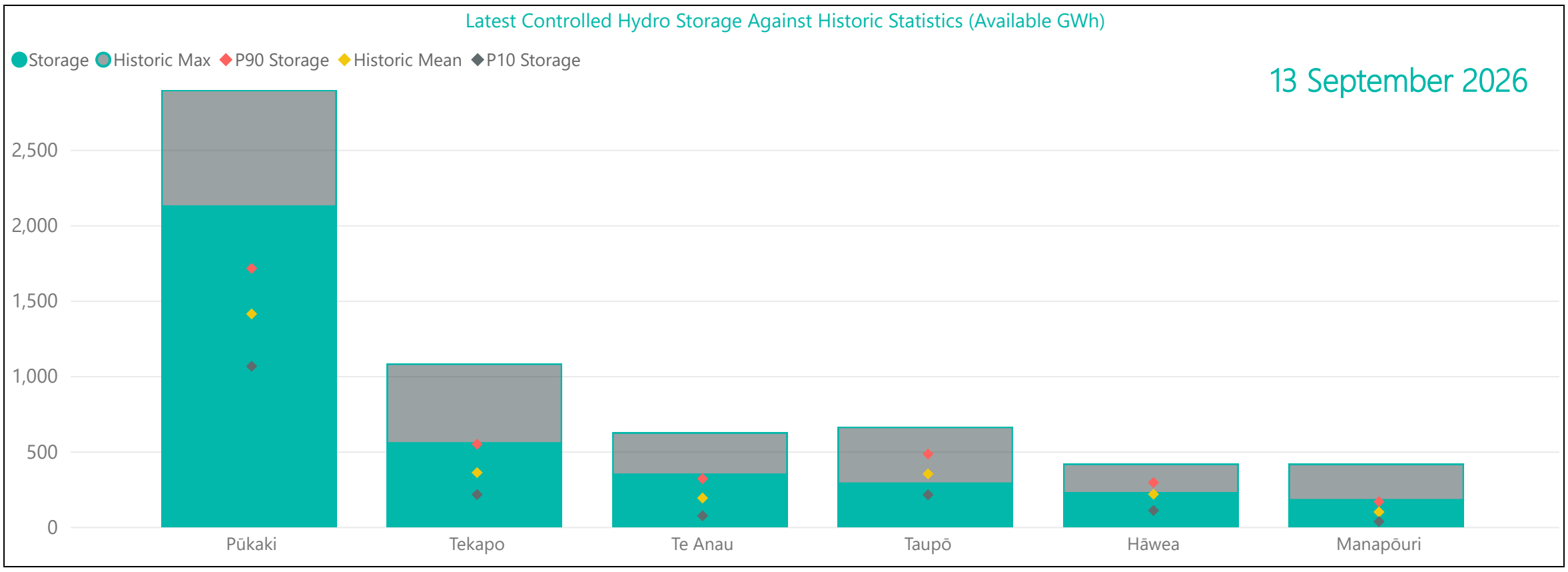
CO2 Tonnes/Day

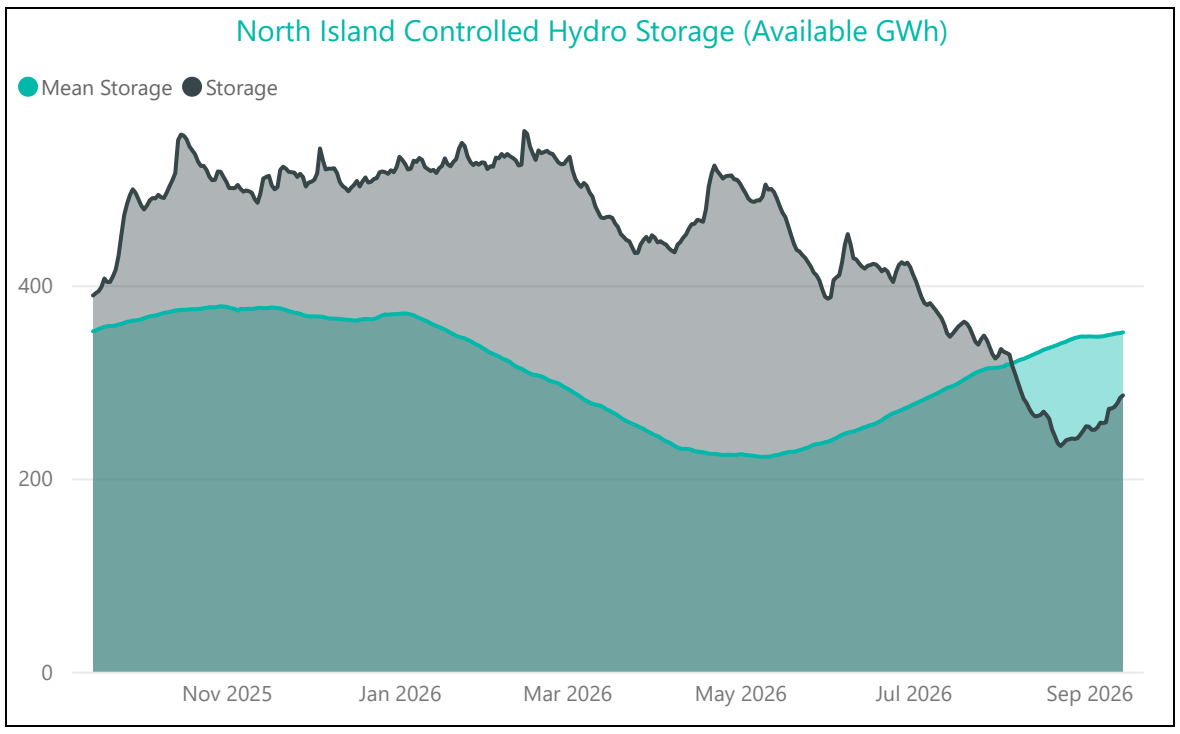


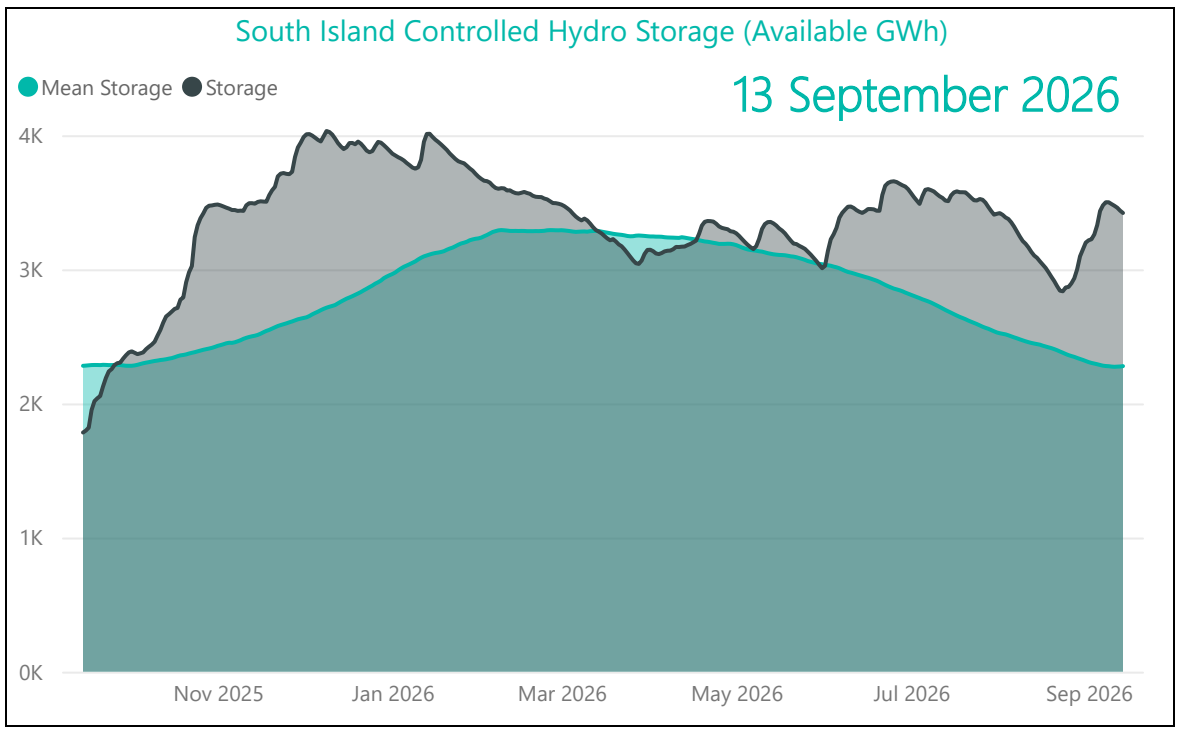
CO2 g/kWh

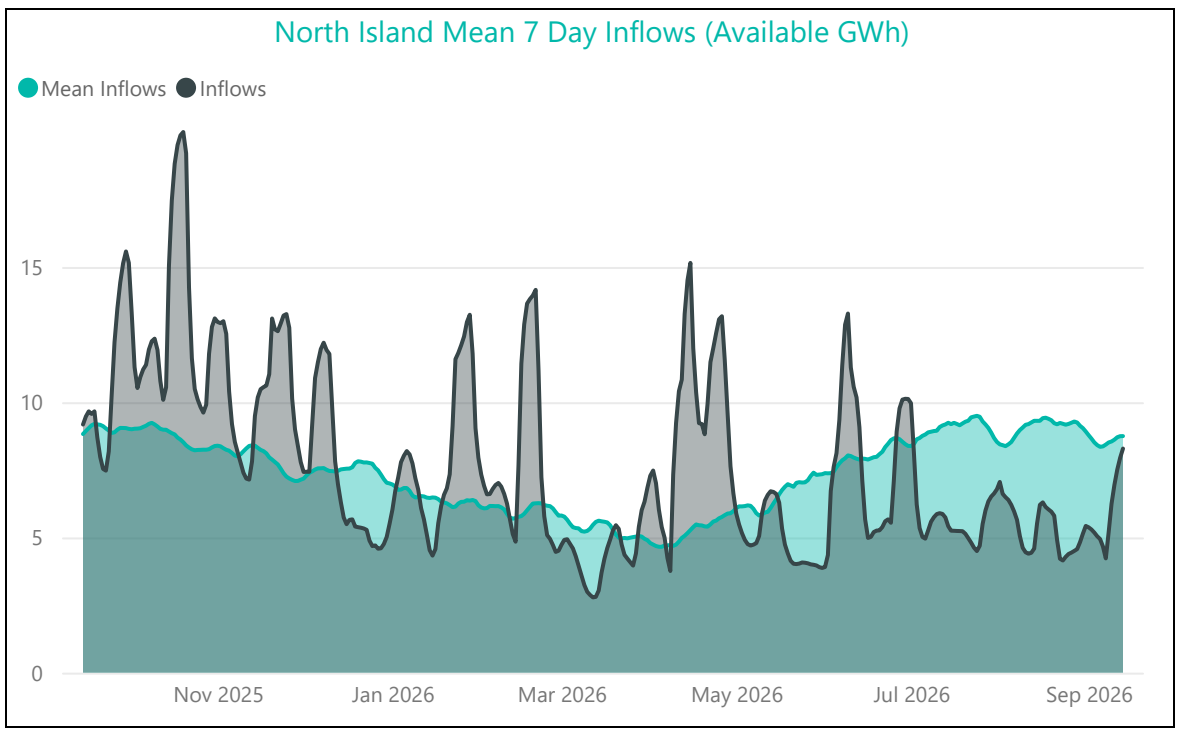


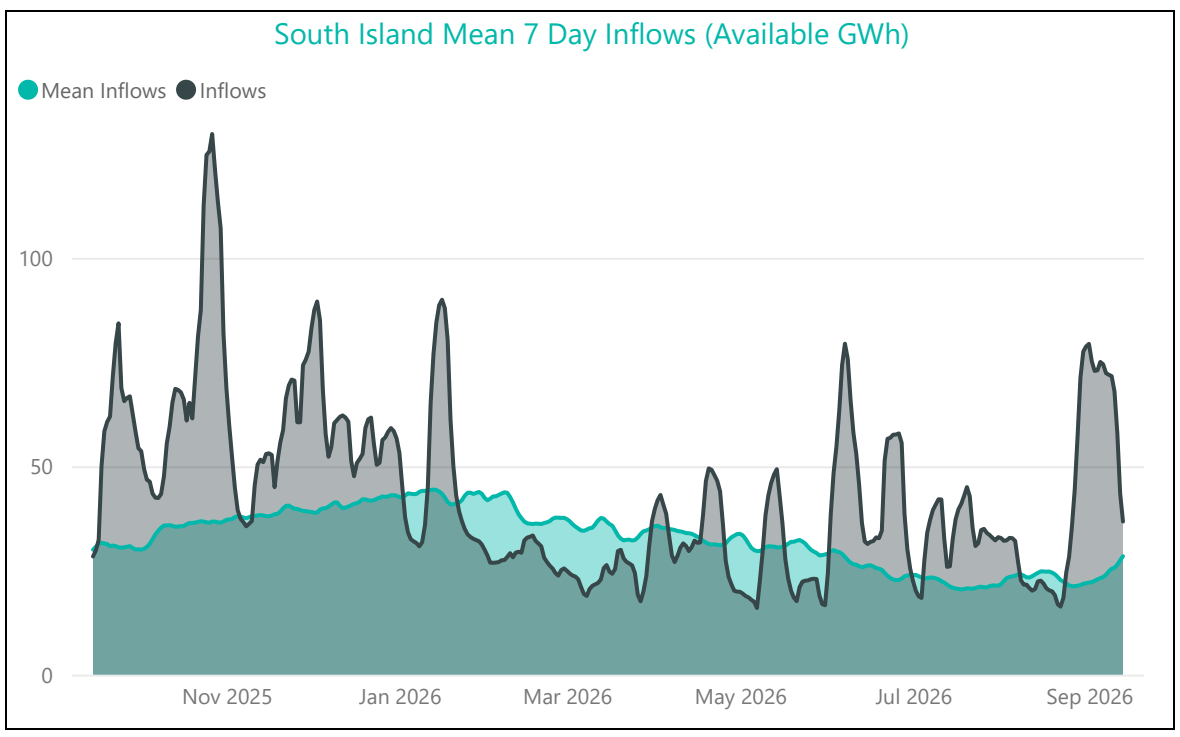
Hydro Storage











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

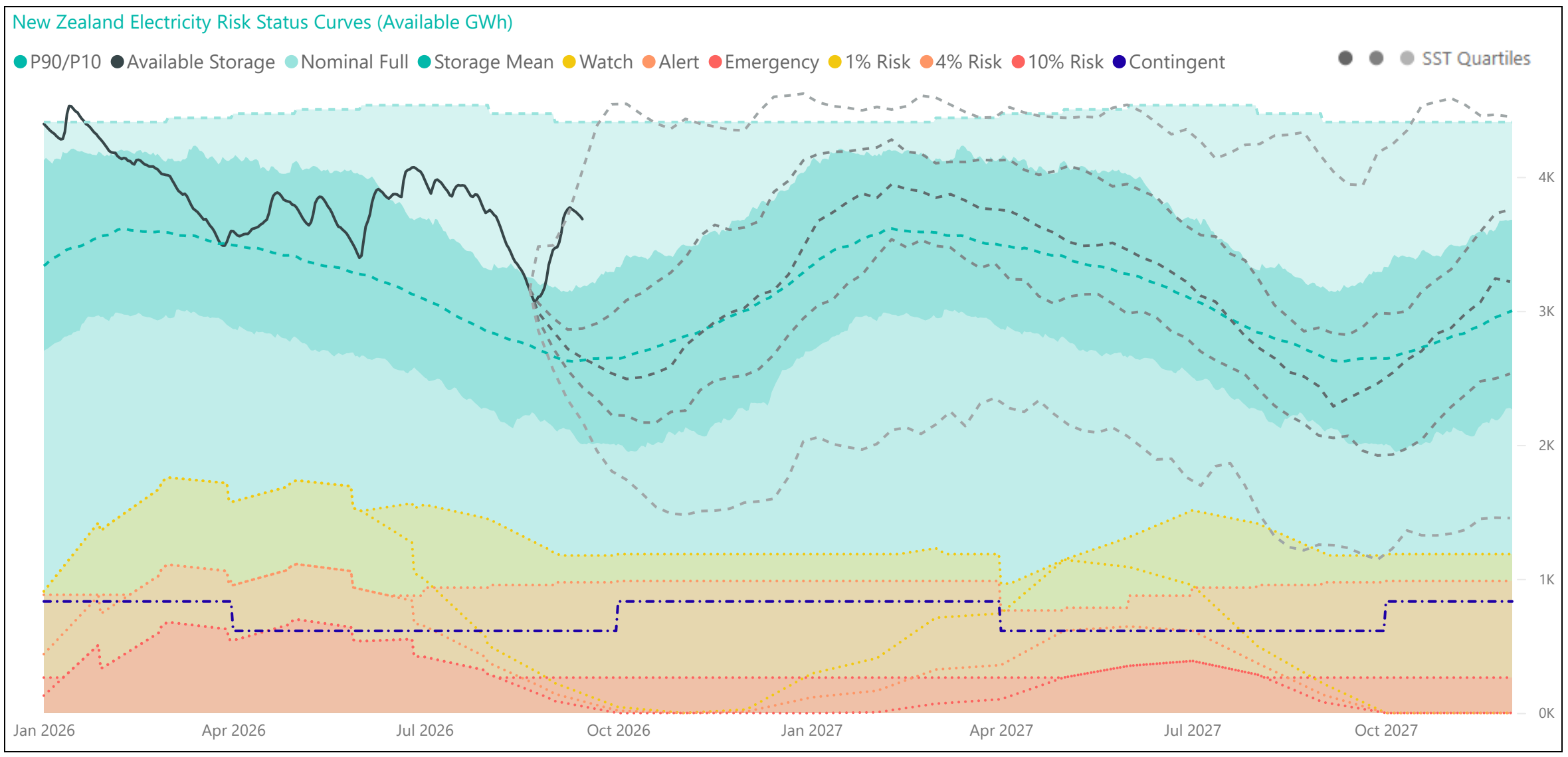
For any inquiries related to security of supply contact market.operations@transpower.co.nz

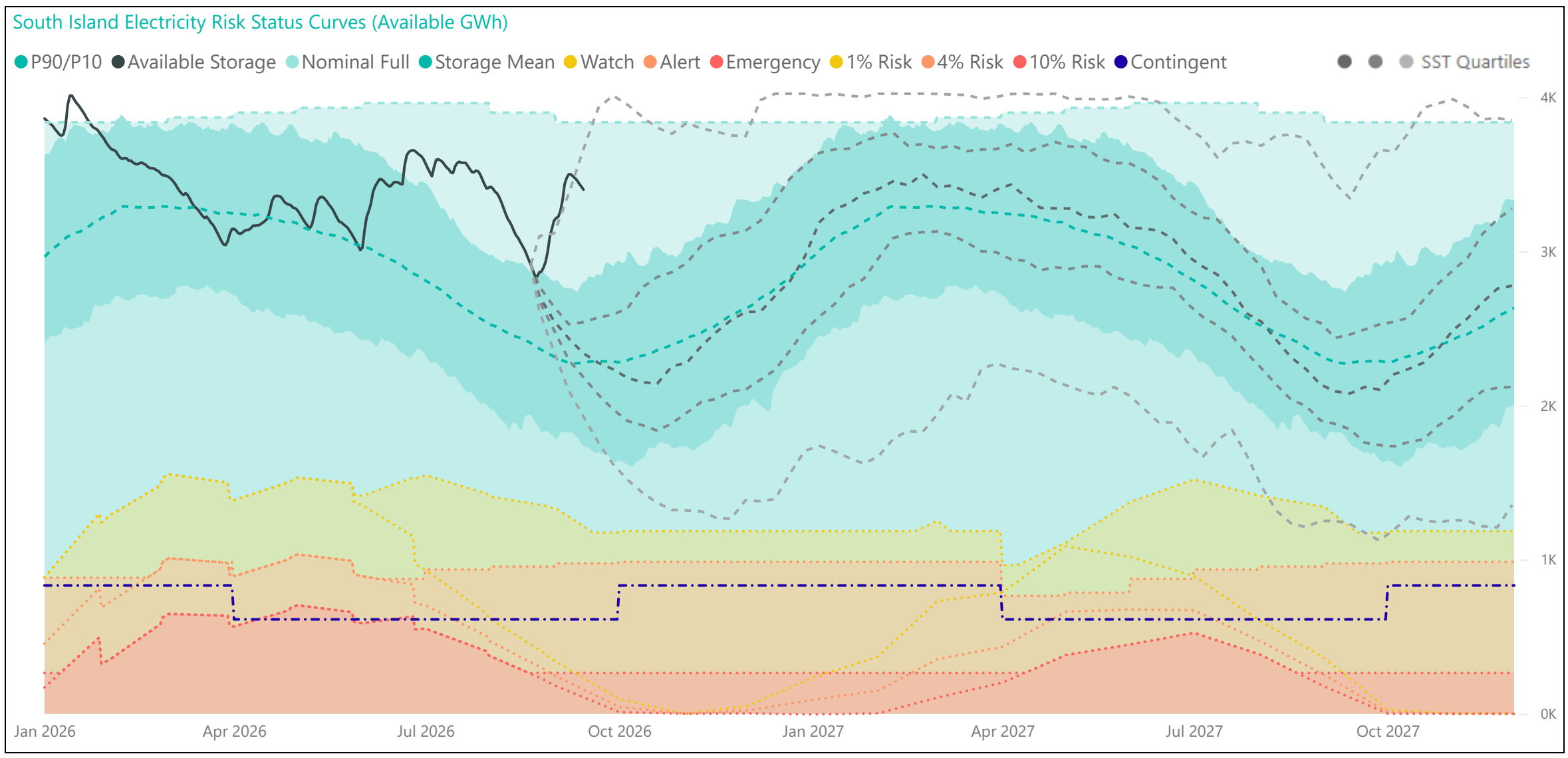
Hydro data used in this report is sourced from *NZX Hydro*.

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





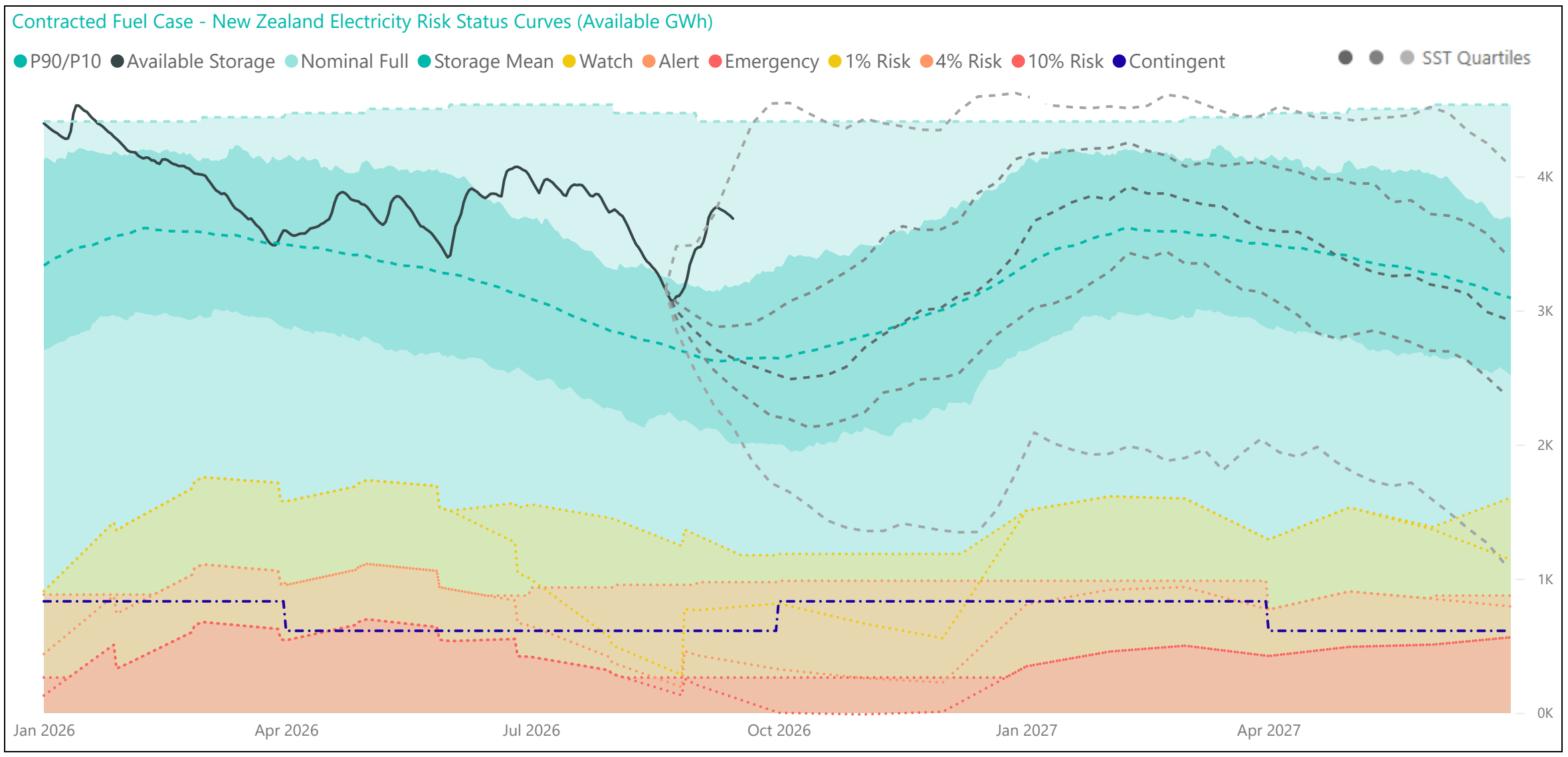
Electricity Risk Curve Explanation:

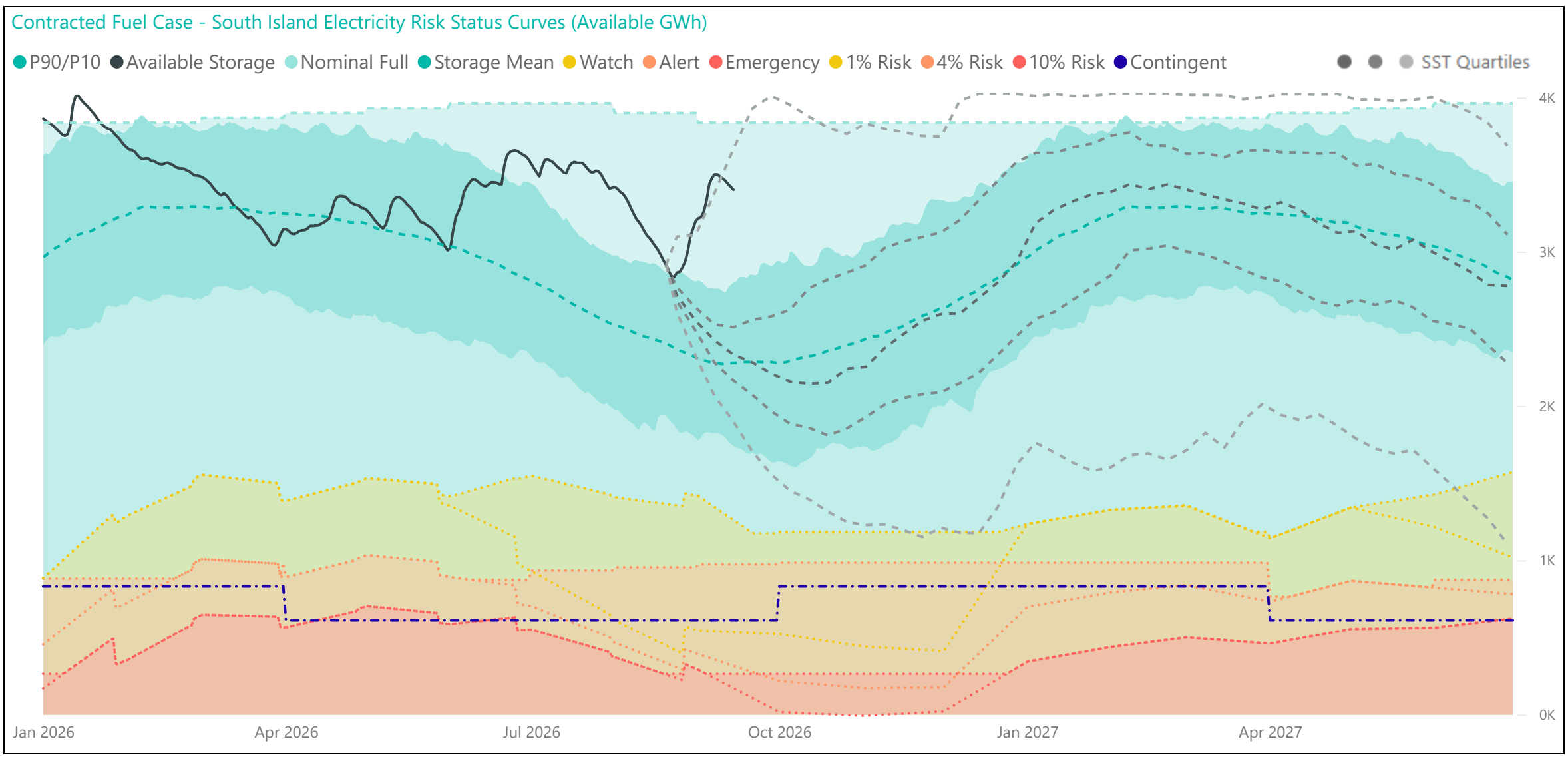
Watch Curve - The maximum of the one percent risk curve or the Alert curve plus the greater of the Watch adder or the worst-case simulated storage drop
Alert Curve - The maximum of the four percent risk curve and the floor and buffer
Emergency Curve - The maximum of the 10 percent risk curve and the 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





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.

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).